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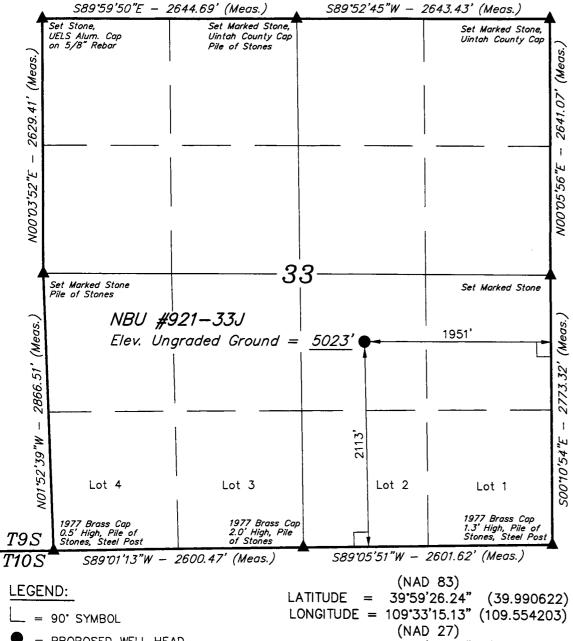
STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING, OF OIL, GAS & MININGAMENDED REPORT (highlight changes)

| U 1 | | | | | | | I E MINEDA | L LEASE NO: | 6. SURFACE: |
|---|------------------------------------|-----------------------------|--------------------|-------------------|--|--------------------------|----------------|-----------------|--------------------|
| | | PPLICA | TION FOR | PERMIT TO | DRILL | | STUO- | -015630-ST | State |
| 1A. TYPE OF WO | RK: DI | RILL 🔽 | REENTER [| DEEPEN [| | | 7. IF INDIA | N, ALLOTTEE OR | TRIBE NAME: |
| | | GAS [7] | OTHER | SING | SLE ZONE [| MULTIPLE ZONI | = / | CA AGREEMENT N | |
| B. TYPE OF WELL: OIL GAO OTTEN | | | | | | | | 18900A NUMBER | atural Bu |
| 2. NAME OF OPE | RATOR: T OIL & GA | SCOMPA | NY. L.P. | | | | 1 | 921-33J | |
| 3. ADDRESS OF | | | | | | PHONE NUMBER: | | AND POOL, OR W | |
| 1368 S 120 | | CITY VER | NAL STA | TE UT ZIP 840 | 078 | 781-7060 | | TRAL BUTTI | |
| | WELL (FOOTAGE | | 62349 | 8× 3 | 9, 99 04 | 57 | MERID | IAN: | |
| AT SURFACE: | 2113' FSL | 1951 FEL | 44274 | 904 -16 | 4.553 | 472 | NWSE | 33 9S | 21E |
| | PRODUCINGZOI | | _ | | | | | | L 40 OTATE |
| | | | AREST TOWN OR PO | | | | 12. COUN | | 13. STATE: UTAH |
| | | | DURAY, UTAI | | | 105 | | ACRES ASSIGNED | TO THIS WELL: |
| 15. DISTANCE TO | NEAREST PROF | PERTY OR LEASE | LINE (FEET) | 16. NUMBER OF | ACRES IN LE | 285.29 | 17. NOMBER OF | ACINEO AGGIONEL | 40 |
| 1951' | | | | 19. PROPOSED | DEDTH: | 265.29 | 20, BOND DESCR | RIPTION: | |
| APPLIED FOR | O NEAREST WELL R) ON THIS LEASE | . (DRILLING, CO E (FEET) | VIMLETED, OR | 19. PROPOSED | OEF III. | 9,702 | 1 | URETY RL | 30005236 |
| | O TOPO C | D DE DT GR E | TC): | 22. APPROXIM | ATE DATE WO | RK WILL START: | 23. ESTIMATED | | |
| | | | 10. j. | | | | TO BE DE | ETERMINE | ס |
| 3022.9 0 | HORADED | | | | | | | | |
| 24. | | | PROPO | SED CASING A | ND CEME | NTING PROGRAM | | | |
| SIZE OF HOLE | CASING SIZE, | GRADE, AND W | EIGHT PER FOOT | SETTING DEPTH | | CEMENT TYPE, QU | | | |
| 12 1/4" | 9 5/8" | 32.3# | H-40, STC | 2,500 | PREM C | CMT | 265 SX | 1.1 | |
| 7 7/8" | 4 1/2" | 11.6# | I-80, LTC | 9,702 | PREM L | ITE II | 510 SX | 3.3 | 8 11.0 |
| | | | | | 50/50 P | OZ G | 1400 SX | 1400 SX 1.31 | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | ļ <u>.</u> | | | | | | | | |
| | | · | | | <u> </u> | | | | |
| 25. | | | | ATTA | CHMENT | s | | | |
| VERIFY THE FO | DLLOWING AREA | TTACHED IN ACC | CORDANCEWITH THI | EUTAH OIL AND GAS | CONSERVATIO | N GENERAL RULES: | | | |
| | | | | | l — | COMPLETE DRILLING PLAN | | | |
| | | | NSED SURVEYOR OF | | | FORM 5, IF OPERATOR IS P | | ANY OTHER THAN | THE LEASE OWNER |
| EVIDEN | ICE OF DIVISION | OF WATER RIGH | ITS APPROVAL FOR I | JSE OF WATER | | FORM 5, IF OPERATOR IS P | ERSON OR COMPA | ANTOTHERTHAN | THE LEADE OWNER |
| | | | | | L | | | | |
| | - POINT, DEBI | RA DOMEN | NICI | | T | ITLE ENVIRONME | NTAL ASSI | STANT | |
| NAME (PLEASE | = PKIN1) = ===. | | , | | ······································ | 3/11/2005 | | | |
| SIGNATURE | 1) elic | alx | menua | | D | ATE 3/11/2005 | | | |
| This space for S | tate use only) | | | | | | | | |
| | | | | | | Balance duals. | pproved | by the | 2 |
| | | In | 0111 | ı f | | | Itah Divis | sion of | : |
| API NUMBER A | SSIGNED: | 13-04 | 7-3639 | <u> </u> | APPRO | val: Oi | i, Gas and | Mining | • |
| | | | | | | Date: 9 | NS-10 | -08 | |
| (11/2001) | | | | (See Instruc | tions on Reven | - / /- | M | CITEX | ∇ |
| , , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | - | | By : -√∑ | Short Short | (AAA) | |

T9S, R21E, S.L.B.&M.



LEGEND:

= PROPOSED WELL HEAD.

= SECTION CORNERS LOCATED.

LATITUDE = 39.59.26.37" (39.990658)

LONGITUDE = $109^{\circ}33'12.65''$ (109.553514)

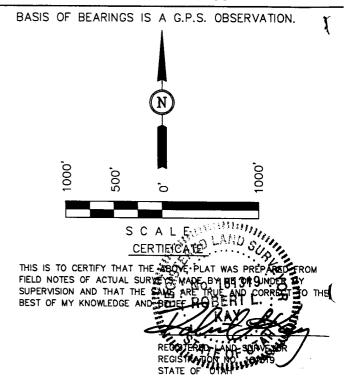
WESTPORT OIL AND GAS COMPANY, L.P.

Well location, NBU #921-33J, located as shown in the NW 1/4 SE 1/4 of Section 33, T9S, R21E, S.L.B.&M. Uintah County, Utah.

BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.

BASIS OF BEARINGS

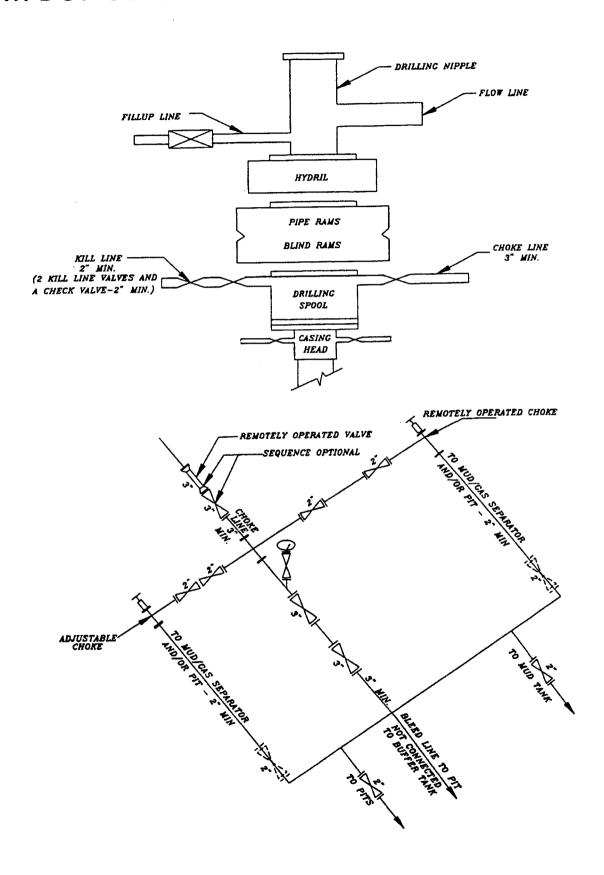


UINTAH ENGINEERING & LAND SURVEYING 85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

| SCALE 1" = 1000' | | DATE SURVEYED: 1-10-05 | DATE DRAWN: 1-18-05 | | |
|---------------------|-----------------|---------------------------|------------------------|--|--|
| G.O. B.C. E.C.C | <u> </u> | REFERENCES G.L.O. PLAT | | | |
| WEATHER COLD | FILE WESTPOR | T OIL AND GAS | COMPANY, L.P. | | |

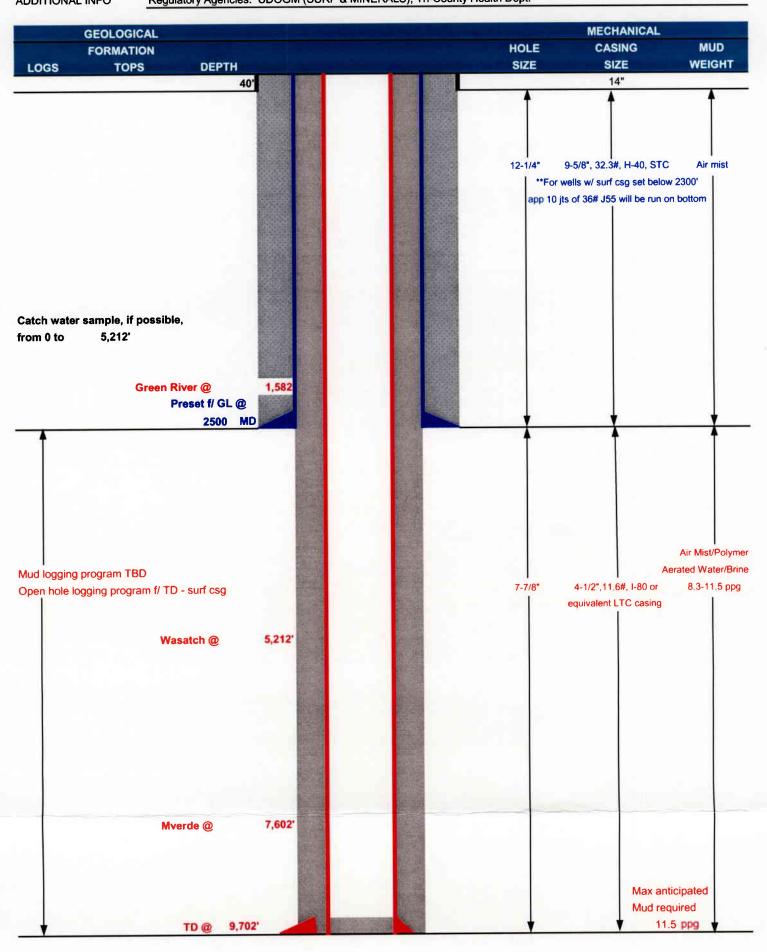
5M BOP STACK and CHOKE MANIFOLD SYSTEM





Westport Oil and Gas Company, L.P. DRILLING PROGRAM

DATE April 21, 2005 **COMPANY NAME** Westport Oil and Gas Co., L.P. MD/TVD NBU 921-33J TD 9,702' WELL NAME COUNTY Uintah STATE Utah **ELEVATION** 5,022' GL KB 5,037' **FIELD Natural Buttes** SURFACE LOCATION BHL Straight Hole NWSE SECTION 33-T9S-R21E 2113'FSL & 1951'FEL 39.990658 Longitude: 109.553514 OBJECTIVE ZONE(S) Wasatch/Mesaverde Regulatory Agencies: UDOGM (SURF & MINERALS), Tri-County Health Dept. ADDITIONAL INFO





Westport Oil and Gas Company, L.P. **DRILLING PROGRAM**

CASING PROGRAM

| | | | | | | | | | DESIGN FACTORS | | | |
|------------|--------|------|--------|------------------|-------|------|-------|-------|----------------|---------|--|--|
| | SIZE | 11 | NTERVA | AL. | WT. | GR. | CPLG. | BURST | COLLAPSE | TENSION | | |
| CONDUCTOR | 14" | | 0-40' | | | | | 2270 | 1370 | 254000 | | |
| SURFACE | 9-5/8" | 0 | to | 2100 | 32.30 | H-40 | STC | | 1.39 | 3.59 | | |
| | | | | | | | | 3520 | 2020 | 564000 | | |
| | 9-5/8" | 2100 | to | 2500 | 36.00 | J-55 | STC | , | 1.73 | 7.98 | | |
| | | | | N ₄ W | | | | 7780 | 6350 | 201000 | | |
| PRODUCTION | 4-1/2" | 0 | to | 9702 | 11.60 | I-80 | LTC | 2.12 | 1.09 | 2.05 | | |
| | | | | | | | | | | | | |

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

11.5 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP

3667 psi

CEMENT PROGRAM

| | | FT. OF FILL | DESCRIPTION | SACKS | EXCESS | WEIGHT | YIELD |
|---|-----------------|-------------|--|---------------|---------------|--------|-------|
| SURFACE | LEAD | 500 | Premium cmt + 2% CaCl | 215 | 60% | 15.60 | 1.18 |
| Option 1 | | | + .25 pps flocele | | | | |
| орион : | TOP OUT CMT (1) | 250 | 20 gals sodium silicate + Premium cmt | 100 | | 15.60 | 1.18 |
| | | | + 2% CaCl + .25 pps flocele | | | | |
| | TOP OUT CMT (2) | as required | Premium cmt + 2% CaCl | as req. | | 15.60 | 1.18 |
| SURFACE | | | NOTE: If well will circulate water to surf | ace, option a | 2 will be uti | lized | |
| Option 2 | LEAD | 2000 | Prem cmt + 16% Gel + 10 pps gilsonite | 230 | 35% | 11.00 | 3.82 |
| | | | + 25 pps Flocele + 3% salt BWOC | | | | |
| | TAIL | 500 | Premium cmt + 2% CaCl | 180 | 35% | 15.60 | 1.18 |
| | | | + .25 pps flocele | | | | |
| | TOP OUT CMT | as required | Premium cmt + 2% CaCl | as req. | i | 15.60 | 1.18 |
| | | · | | | | | |
| PRODUCTIO |)N LEAD | 4,712' | Premium Lite II + 3% KCI + 0.25 pps | 510 | 60% | 11.00 | 3.38 |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | celloflake + 5 pps gilsonite + 10% gel | | | | |
| | | | + 0.5% extender | | | | |
| | | | | | | | |
| | TAIL | 4,990' | 50/50 Poz/G + 10% salt + 2% gel | 1400 | 60% | 14.30 | 1.31 |
| | | | +.1% R-3 | | | | |

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

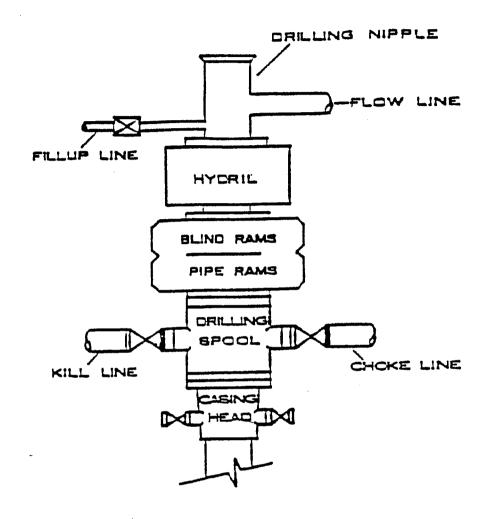
FLOAT EQUIPMENT & CENTRALIZERS

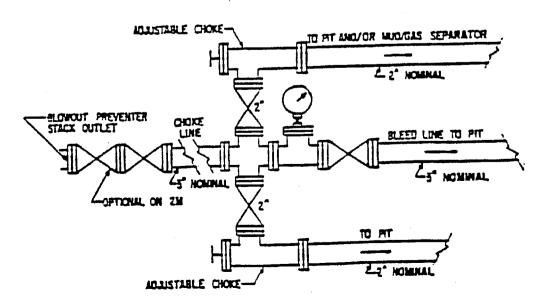
| SURFACE | Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe. | | | | | | | |
|------------|---|--|--|--|--|--|--|--|
| | | | | | | | | |
| PRODUCTION | Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers. | | | | | | | |
| | | | | | | | | |

| TION | AL INFORMATION | | | | | | | | |
|--------|--|---|---|--|--|--|--|--|--|
| | Test casing head to 750 psi a | after installing. Test surface casing to 1,500 psi prior to drilling out. | | | | | | | |
| • | BOPE: 11" 5M with one annu | ular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & | | | | | | | |
| • | tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper | | | | | | | | |
| | & lower kelly valves. | | | | | | | | |
| • | Drop Totco surveys every 20 | 00'. Maximum allowable hole angle is 5 degrees. | | | | | | | |
| , | | | | | | | | | |
| ILLING | ENGINEER: | DATE: | | | | | | | |
| | | Brad Laney | | | | | | | |
| ILLING | SUPERINTENDENT: | DATE: | : | | | | | | |
| | | Randy Bayne | | | | | | | |

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

EOP STACK





NBU #921-33J NWSE Sec. 33, T9S-R21E Uintah County, UT STUO-015630-ST

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. Planned Access Roads:

Approximately 300' of new access road is proposed. Refer to Topo Map B for the location of the proposed access road.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities will be determined at the on-site.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

3. Location of Existing Wells Within a 1-Mile Radius

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities & Pipelines

The following guidelines will apply if the well is productive.

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes

will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 100' of up to 8" pipeline is proposed. The pipeline will be butt-welded together. Refer to Topo D for the proposed pipeline.

5. <u>Location and Type of Water Supply:</u>

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. Source of Construction Materials

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

7. Methods of Handling Waste Materials

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 16 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled By truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E.

8. Ancillary Facilities

None are anticipated.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

10. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

11. Surface Ownership:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

12. Other Information:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when it is received by our office.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it Within 460' of any non-committed tract lying within the boundaries of the Unit.

13. Lessee's or Operators's Representative & Certification:

Debra Domenici Environmental Assistant Westport O&G Co. 1368 South 1200 East Vernal, UT 84078 (435) 781-7060 Randy Bayne Drilling Operations Manager Westport O&G Co. 1368 South 1200 East Vernal, UT 84078 (435)781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Westport O&G Co. is considered to be the operator of the subject well. Westport O&G Co. agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005236.

| NBU #921-33J | Surface Use & Operations Plan | Page 6 |
|----------------|-------------------------------|--------|
| 1100 11721-330 | Dulliude est de g | |

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Delra Domenici

3/11/05

Date

NBU #921-33J NWSE SECTION 33-T9S-R21E UINTAH COUNTY, UTAH LEASE NUMBER: STUO-015630-ST

ONSHORE ORDER NO. 1 WESTPORT OIL & GAS COMPANY

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers:

| Formation | <u>Deptn</u> |
|-------------|--------------|
| Uinta | Surface |
| Green River | 1582' |
| Wasatch | 5212' |
| Mesa Verde | 7602' |
| Total Depth | 9702' |
| | |

2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

| Substance | <u>Formation</u> | <u>Depth</u> |
|----------------|------------------|--------------|
| | Green River | 1582' |
| Gas | Wasatch | 5212' |
| | Mesa Verde | 7602' |
| Water | N/A | |
| Other Minerals | N/A | |

3. <u>Pressure Control Equipment:</u>

Please refer to the attached Drilling Program.

4. Proposed Casing & Cementing Program:

Please refer to the attached Drilling Program.

5. <u>Drilling Fluids Program:</u>

Please refer to the attached Drilling Program.

6. Evaluation Program:

Please refer to the attached Drilling Program.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure at 9702' TD approximately equals 3880.8 psi (calculated at 0.4 psi/foot).

Maximum anticipated surface pressure equals approximately 1746.36 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. <u>Anticipated Starting Dates & Notification of Operations:</u>

Please refer to the attached Drilling Program.

9. <u>Variances</u>:

Please refer to the attached Drilling Program.

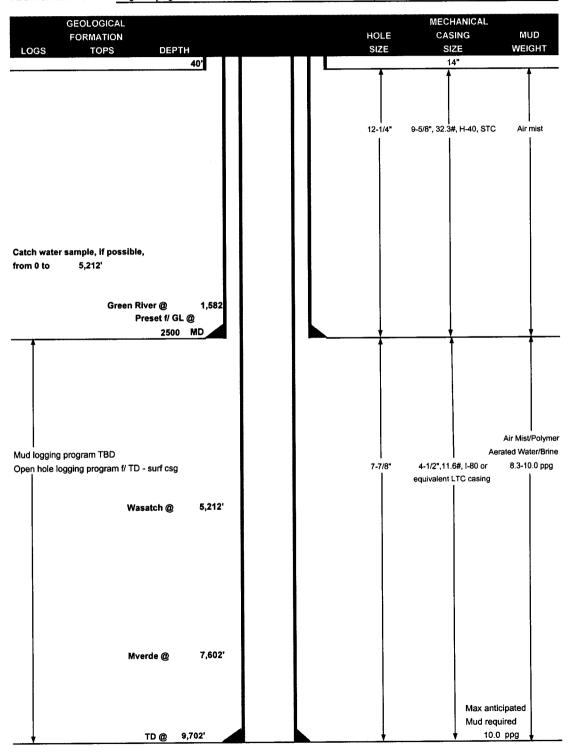
10. Other Information:

Please refer to the attached Drilling Program.



Westport Oil and Gas Company, L.P. DRILLING PROGRAM

| COMPANY NAME | Westport Oil and Gas Co., L.P. | DATE | March 1, | 2005 | | |
|-------------------|--|-----------|----------------|------------|-----|---------------|
| WELL NAME | NBU 921-33J | TD | 9,702' | MD/TVD | | |
| FIELD LOVE | COUNTY Uintah STATE | Utah | ELEVATION | 5,022' GL | KB | 5,037' |
| SURFACE LOCATION | NWSE SECTION 33-T9S-21E 2113'FSL & 19 | 51'FEL | - | | BHL | Straight Hole |
| | Latitude: 39.990658 Longitude: 109. | 553514 | | | | |
| OBJECTIVE ZONE(S) | Wasatch/Mesaverde | | | | | |
| ADDITIONAL INFO | Regulatory Agencies: UTDOGM, (SURF & M | INERALS), | Tri-County Hea | alth Dept. | | |





Westport Oil and Gas Company, L.P. DRILLING PROGRAM

CASING PROGRAM

| | | | | | | | | DESIGN FACTORS | | |
|------------|--------|----|-------|------|-------|------|-------|--------------------|--------------|----------------|
| | SIZE | IN | TERV | ٨L | WT. | GR. | CPLG. | BURST | COLLAPSE | TENSION |
| CONDUCTOR | 14" | | 0-40' | | | | | 2270 | 1370 | 254000 |
| SURFACE | 9-5/8" | 0 | to | 2500 | 32.30 | H-40 | STC | 0.78****** 7780 | 1.17 6350 | 3.59 201000 |
| PRODUCTION | 4-1/2" | 0 | to | 9702 | 11.60 | I-80 | LTC | 2.67 | 1.26 | 2.05 |
| | | | | | | | | | | |

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 10.0 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

2911 psi

Burst SF is low but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

CEMENT PROGRAM

| İ | FT. OF FILL | DESCRIPTION | SACKS | EXCESS | WEIGHT | YIELD |
|-----------------|-------------|--|------------|---------------|------------|-------|
| SURFACE LEAD | 500 | Premium cmt + 2% CaCl | 215 | 60% | 15.60 | 1.18 |
| Option 1 | | + .25 pps flocele | | | | |
| TOP OUT CMT (1) | 200 | 20 gals sodium silicate + Premium cmt | 50 | | 15.60 | 1.18 |
| | | + 2% CaCl + .25 pps flocele | | | | |
| TOP OUT CMT (2) | as required | Premium cmt + 2% CaCl | as req. | | 15.60 | 1.18 |
| SURFACE | | NOTE: If well will circulate water to se | urface, op | tion 2 will b | e utilized | |
| Option 2 LEAD | 1500 | Prem cmt + 16% Gel + 10 pps gilsonite | 170 | 35% | 11.00 | 3.82 |
| • | | +.25 pps Flocele + 3% salt BWOC | | | | |
| TAIL | 500 | Premium cmt + 2% CaCl | 180 | 35% | 15.60 | 1.18 |
| | | + .25 pps flocele | | | | |
| TOP OUT CMT | as required | Premium cmt + 2% CaCl | as req. | | 15.60 | 1.18 |
| | | | | | | |
| PRODUCTION LEAD | 4,712' | Premium Lite II + 3% KCI + 0.25 pps | 510 | 60% | 11.00 | 3.38 |
| | | celloflake + 5 pps gilsonite + 10% gel | | | | |
| | | + 0.5% extender | | | | |
| | | | | | | |
| TAIL | 4,990' | 50/50 Poz/G + 10% salt + 2% gel | 1400 | 60% | 14.30 | 1.31 |
| | | +.1% R-3 | | | | |

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

| SURFACE | Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe. |
|------------|---|
| PRODUCTION | Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow |
| | spring centralizers. |

ADDITIONAL INFORMATION

DRILLING SUPERINTENDENT:

DRILLING

| Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out. | | | | | |
|--|--|--|--|--|--|
| BOPE: 11" 3M with one annular and 2 rams. Test to 3,000 psi (annular to 1,500 psi) prior to drilling out. Record on chart recorder & | | | | | |
| rig floor at all times. Kelly to be equipped with upper | | | | | |
| | | | | | |
| | | | | | |
| DATE: | | | | | |
| DATE: | | | | | |
| ֡ | | | | | |

Randy Bayne

^{*}Substitute caliper hole volume plus 15% excess for TAIL if accurate caliper is obtained

WESTPORT OIL AND GAS COMPANY, L.P.

NBU #921-33J SECTION 33, T9S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY, THEN EASTERLY, THEN SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 1.6 MILES TO BEGINNING OF THE PROPOSED ACCESS TO THE NORTH; FOLLOW ROAD FLAGS IN A NORTHERLY DIRECTION APPROXIMATELY 300' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 44.5 MILES.

WESTPORT OIL AND GAS COMPANY, L.P.

NBU #921-33J

LOCATED IN UINTAH COUNTY, UTAH SECTION 33, T9S, R21E, S.L.B.&M.

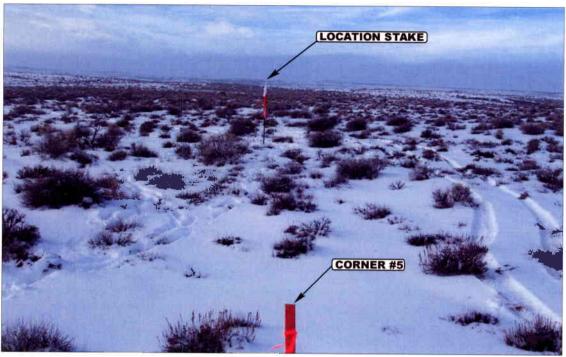


PHOTO: VIEW FROM LOCATION STAKE TO CORNER #5

CAMERA ANGLE: WESTERLY

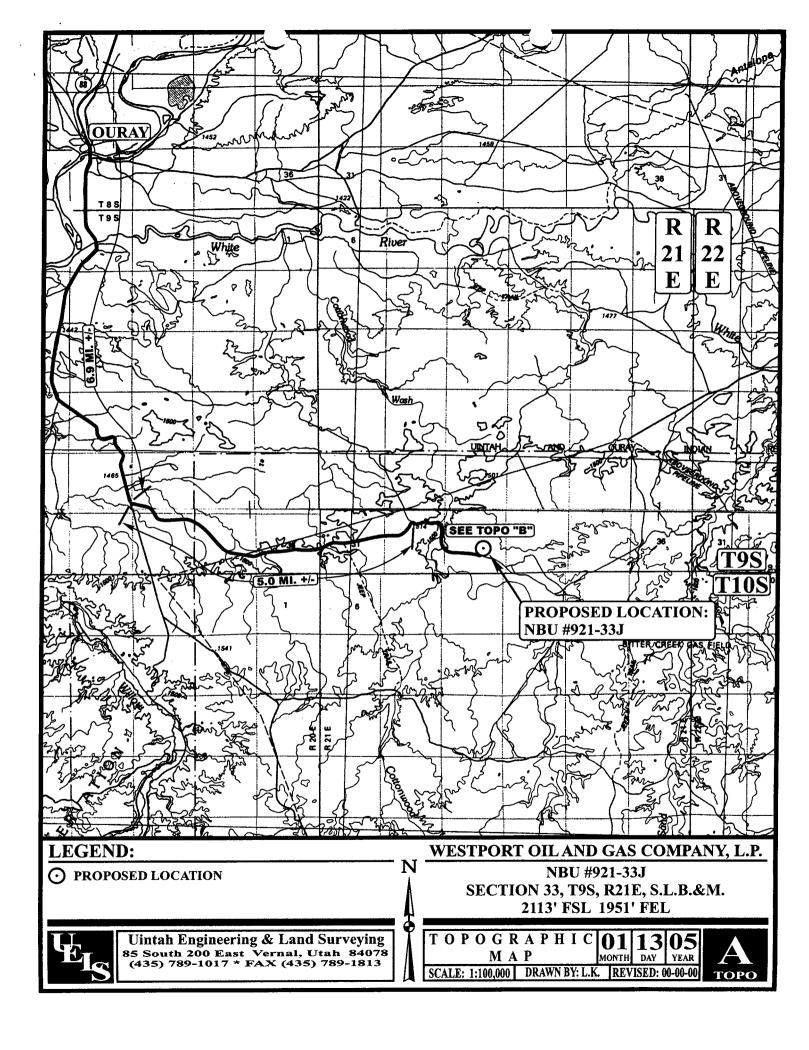


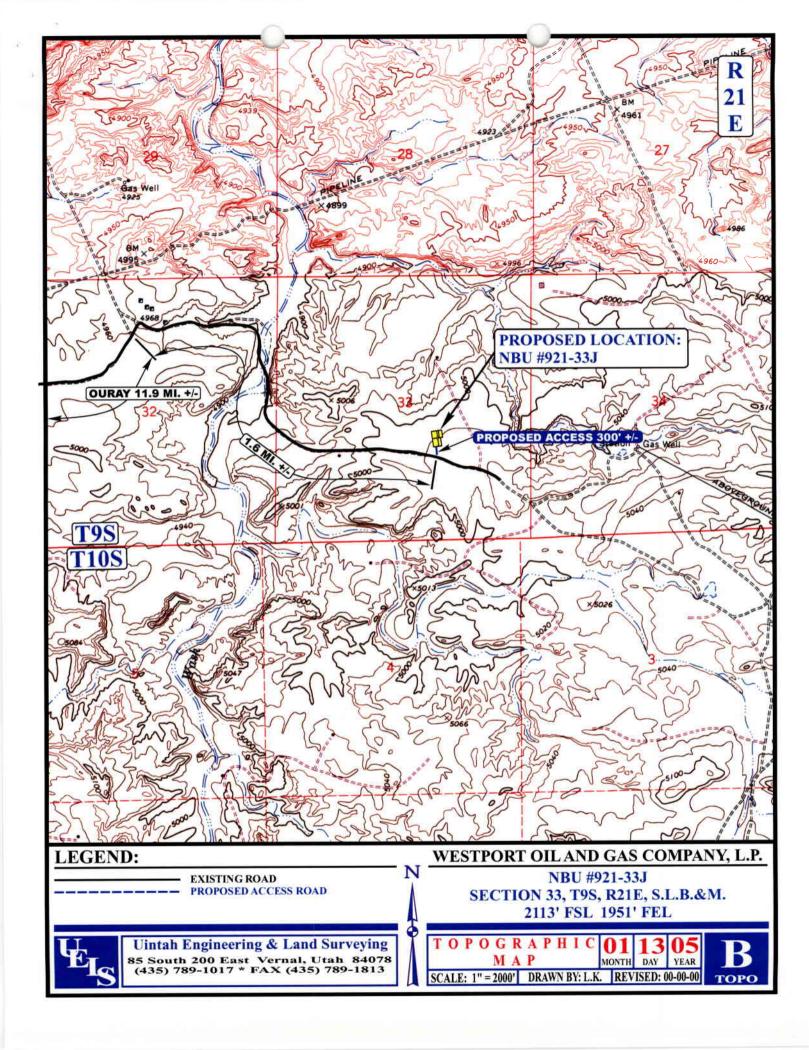
PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

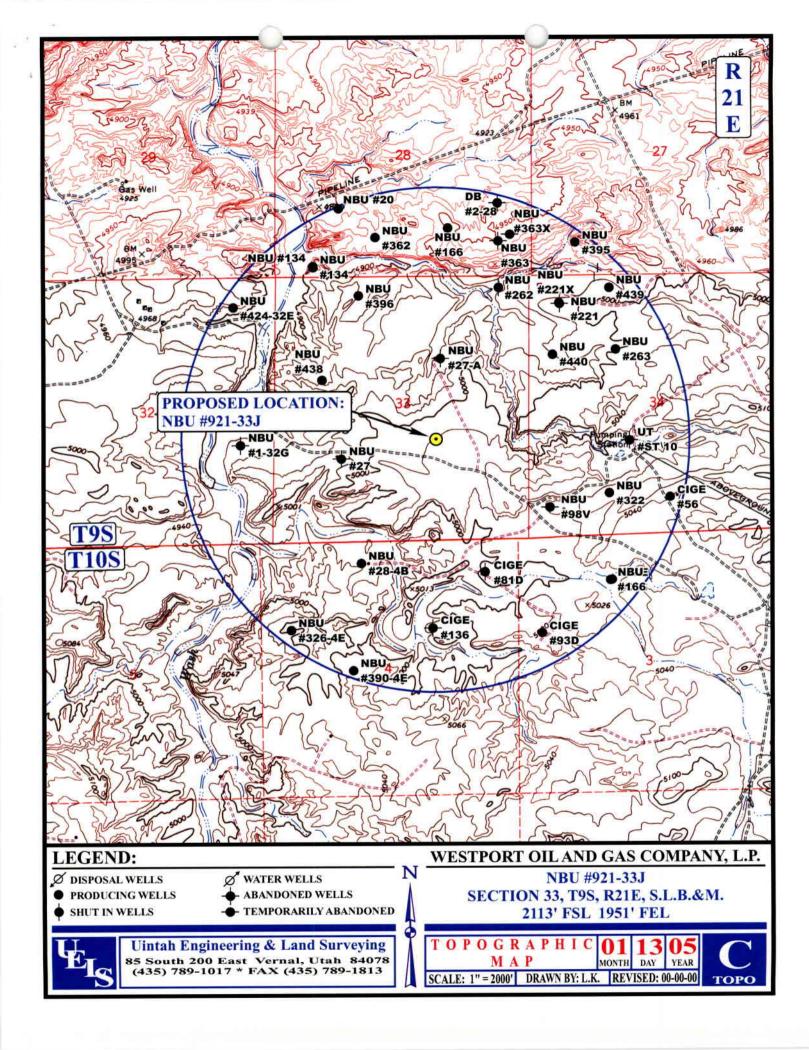
CAMERA ANGLE: NORTHERLY

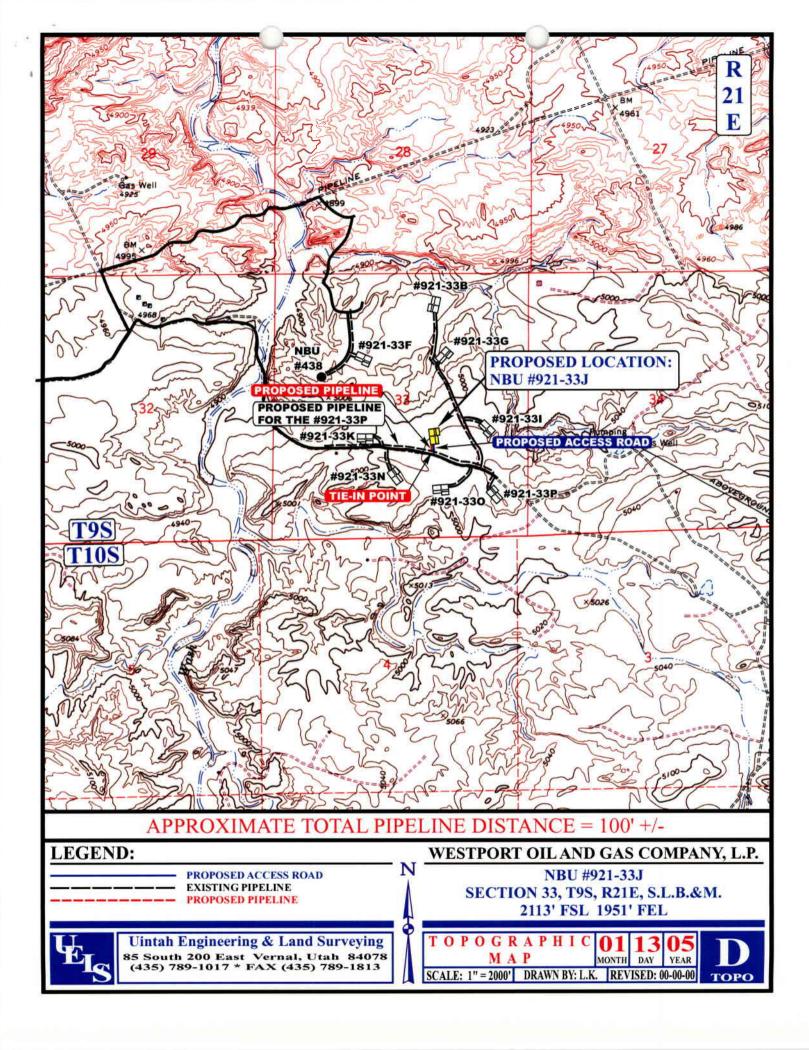


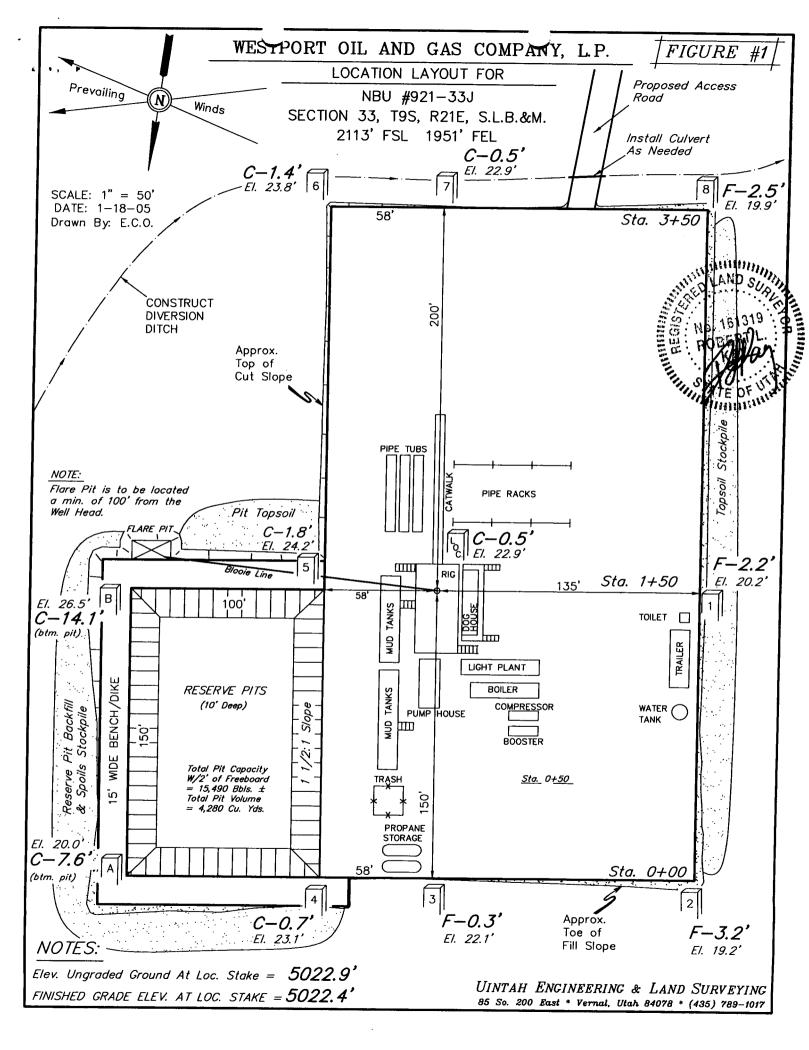


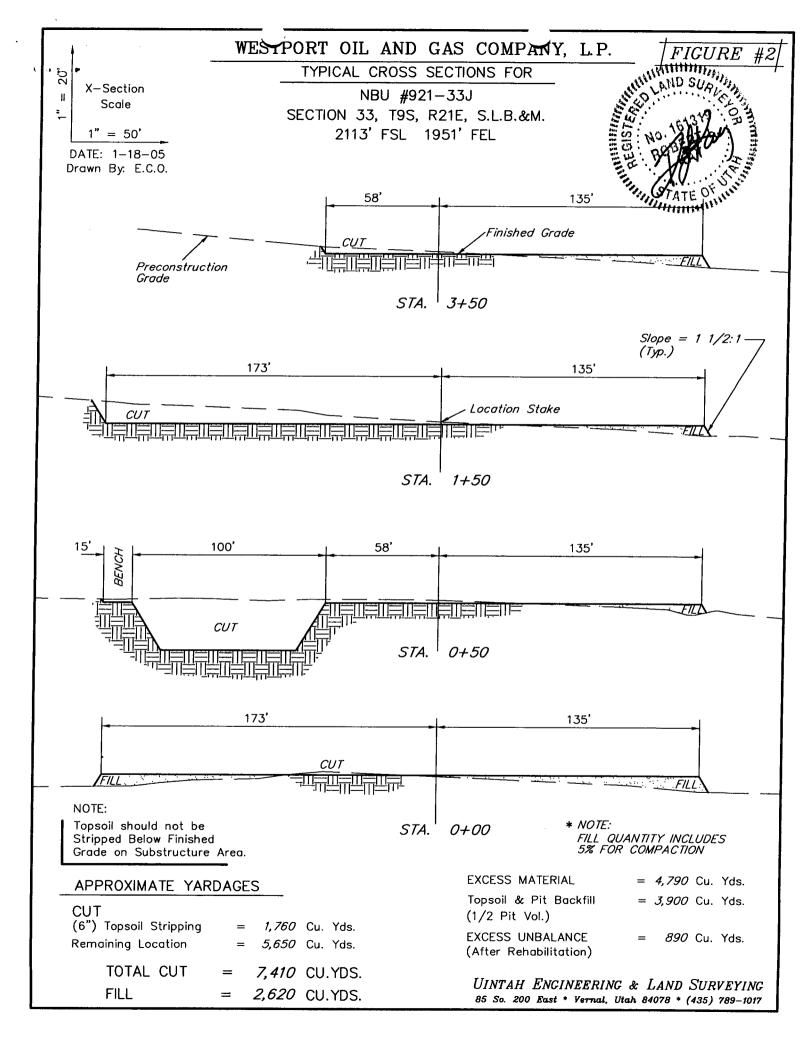






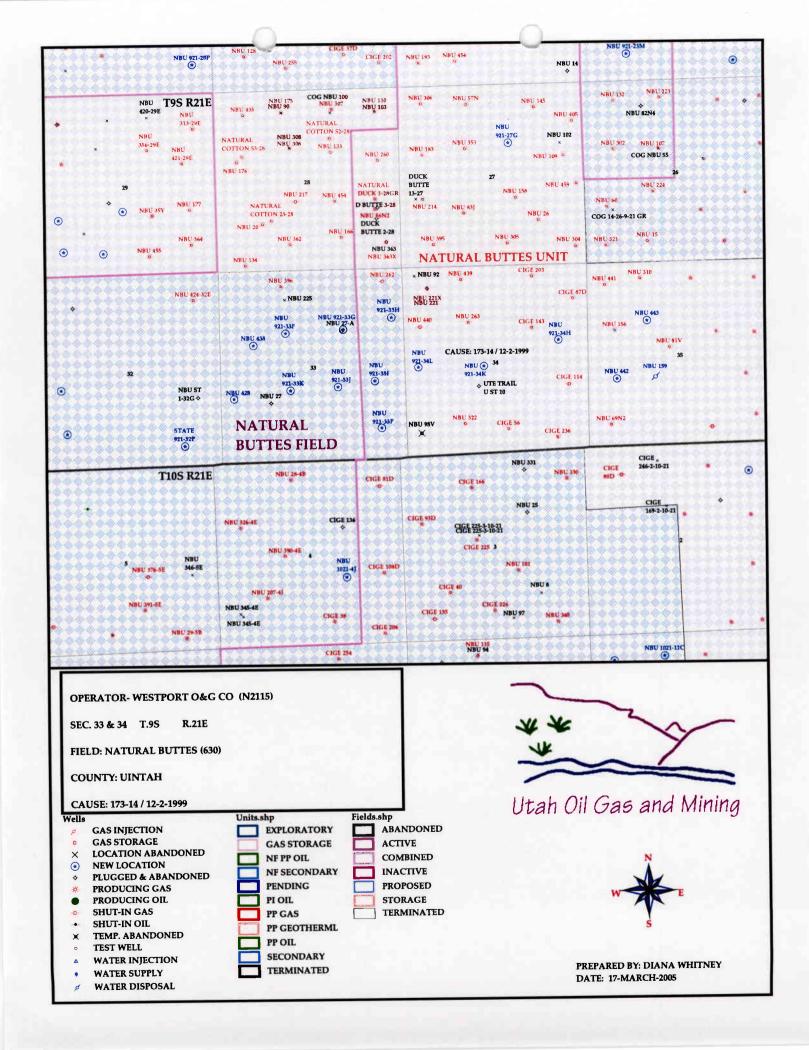






WORKSHEET APPLICATION FOR PERMIT TO DRILL

| APD RECEIVED: 03/15/2005 | API NO. ASSIGN | ED: 43-047-363 | 94 |
|---|--|--|-------------------------------|
| WELL NAME: NBU 921-33J OPERATOR: WESTPORT OIL & GAS CO (N2115) CONTACT: DEBRA DOMENICI | PHONE NUMBER: 4 | 35-781-7060 | |
| PROPOSED LOCATION: | INSPECT LOCATI | 1 BY: / | / |
| NWSE 33 090S 210E SURFACE: 2113 FSL 1951 FEL BOTTOM: 2113 FSL 1951 FEL | Tech Review | Initials | Date |
| UINTAH | Engineering | DRD | 5/9/05 |
| NATURAL BUTTES (630) | Geology | | |
| LEASE TYPE: 3 - State LEASE NUMBER: STUO-015630-ST | Surface | | |
| SURFACE OWNER: 3 - State PROPOSED FORMATION: WSMVD COALBED METHANE WELL? NO | LATITUDE: 39.9 | | |
| Plat Bond: Fed[] Ind[] Sta[] Fee[] (No. RLB0005236) Potash (Y/N) Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. 43-8496) RDCC Review (Y/N) (Date:) HP Fee Surf Agreement (Y/N) | R649-3-3. Drilling Un Board Caus Eff Date: Siting: | TES General From Qtr/Qtr & 920 Exception it e No: 172 | 3-14 -1999 uncomm. Trac |
| COMMENTS: NeedS | Prace (3/30/ | 05 DJ.) | |
| STIPULATIONS: 101 Shale Z- STATEMENT OF | Basis | | |



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

March 18, 2005

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2005 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2005 within the Natural Buttes Unit, Uintah County, Utah.

API# WELL NAME LOCATION

(Proposed PZ Mesaverde)

43-047-36388 NBU 921-34L Sec 34 T09S R21E 2586 FSL 0379 FWL 43-047-36389 NBU 921-34K Sec 34 T09S R21E 2543 FSL 2274 FWL 43-047-36390 NBU 921-34H Sec 34 T09S R21E 2163 FNL 0839 FEL 43-047-36391 NBU 921-33F Sec 33 T09S R21E 1797 FNL 1844 FWL 43-047-36392 NBU 921-33G Sec 33 T09S R21E 1713 FNL 1754 FEL 43-047-36393 NBU 921-33I Sec 33 T09S R21E 2240 FSL 0878 FEL 43-047-36394 NBU 921-33J Sec 33 T09S R21E 2113 FSL 1951 FEL 43-047-36395 NBU 921-33K Sec 33 T09S R21E 2066 FSL 1926 FWL 43-047-36396 NBU 921-33P Sec 33 T09S R21E 0885 FSL 0719 FEL 43-047-36397 NBU 922-36C Sec 36 T09S R22E 0720 FNL 1768 FWL 43-047-36398 NBU 922-36G Sec 36 T09S R22E 2471 FNL 2464 FEL 43-047-36399 NBU 922-36H Sec 36 T09S R22E 2546 FNL 1059 FEL 43-047-36400 NBU 922-36N Sec 36 T09S R22E 0059 FSL 2066 FWL 43-047-36401 NBU 922-360 Sec 36 T09S R22E 1202 FSL 2116 FEL 43-047-36402 NBU 1022-12I Sec 12 T10S R22E 2297 FSL 1046 FEL 43-047-36403 NBU 1022-12P Sec 12 T10S R22E 1083 FSL 0462 FEL

This office has no objection to permitting the wells at this time.

ON-SITE PREDRILL EVALUATION Division of Oil, Gas and Mining

OPERATOR: WESPORT OIL AND GAS COMPANY, L.P.

WELL NAME & NUMBER: NBU 921-33J

API NUMBER: 43-047-36394

LEASE: STUO-015630-ST FIELD/UNIT: Natural Buttes

LOCATION: 1/4,1/4 SENW Sec: 33 TWP: 9S RNG: 21E 1951' FEL 2113' FSL LEGAL WELL SITING: 460 from the unit boundary or uncommitted tracts.

GPS COORD (UTM): GPS not working SURFACE OWNER: STATE OF UTAH

PARTICIPANTS

Dan J. Jarvis (DOGM), DEBRA DOMENICI (WESTPORT). Robert KAY (UELS).

REGIONAL/LOCAL SETTING & TOPOGRAPHY

The regional setting is generally badlands type topography. Flat mesas with deep cut washes and draws are the predominate features. This site is an area of low rolling hills and shallow draws. No major drainages are in the immediate area of the location. Ouray Utah is approximately 17 miles to the northwest of the location. Cottonwood wash is the major drainage in the area and is approximately 1 mile away. Cottonwood wash is a dry watercourse for most of the year.

SURFACE USE PLAN

CURRENT SURFACE USE: Wildlife and livestock grazeing and sport hunting.

PROPOSED SURFACE DISTURBANCE: location will be 350'by 293'. Approximately 300 feet of new access road will be built.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: See attached map from GIS Database.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production facilities will be on location and constructed after drilling the well. The pipeline will follow the access road.

SOURCE OF CONSTRUCTION MATERIAL: All construction material will be borrowed from site during the construction of the location.

ANCILLARY FACILITIES: None will be required.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? (EXPLAIN): UNLIKELY.

WASTE MANAGEMENT PLAN:

Drilled cuttings will be allowed to settle to the bottom of the reserve pit. Liquids from the pit will be allowed to evaporate. Formation water will be confined to storage tanks. Sewage facilities, storage and

general waste disposal will be handled by a commercial contactor. Trash will be contained in trash baskets and hauled to an approved landfill.

| ENVIRONMENTAL | PARAMETERS |
|---------------|------------|
|---------------|------------|

Dan Jarvis

DOGM REPRESENTATIVE

| EMAINOMEMINE IMMENET INC |
|---|
| AFFECTED FLOODPLAINS AND/OR WETLANDS: None |
| FLORA/FAUNA: Sagebrush, Shad scale, Prickly Pear, Cheat Grass, Antelope, Coyotes, Songbirds, Raptors, Rodents, Rabbits. |
| SOIL TYPE AND CHARACTERISTICS: Light brown sandy clay. SURFACE FORMATION AND CHARACTERISTICS: Uinta formation consisting of shales and sandstones. There are Some ledges on this location, the pinguil most likely be built in rock. EROSION/SEDIMENTATION/STABILITY: Very little natural erosion Sedimentation and stability are not a problem. Construction of the location will not increase any erosion problems. |
| PALEONTOLOGICAL POTENTIAL: None observed |
| RESERVE PIT |
| CHARACTERISTICS: 100' BY 150' AND 10' DEEP. |
| LINER REQUIREMENTS (Site Ranking Form attached): A plastic liner will be required based on the ranking form, Westport will line the pit with felend and a 20 mil liner as per company policy. |
| SURFACE RESTORATION/RECLAMATION PLAN |
| As per SITLA. |
| SURFACE AGREEMENT: As per SITLA. |
| CULTURAL RESOURCES/ARCHAEOLOGY: The site has been surveyed by a archeological consulting firm. No archeological sites were found. A report of this investigation will be placed on file. |
| OTHER OBSERVATIONS/COMMENTS |
| This presite was conducted on a partly cloudy day with a light breeze The ground was clear of all snow cover. |
| ATTACHMENTS |
| Photo taken and placed in file. |

5/2005

DATE

Evaluation Ranking Criteria and Ranking Store For Reserve and Onsite Pit Liner Requirements

| Site-Specific Factors | Ranking | Site Ranking |
|--|----------|--------------|
| Distance to Groundwater (feet) | | |
| >200 100 to 200 | 0 | |
| 75 to 100 | 5 10 | |
| 25 to 75 | 15 | |
| <25 or recharge area | 20 | 5 |
| Distance to Surf. Water (feet) | | |
| >1000 300 to 1000 | 0 | |
| 200 to 300 | 2 10 | |
| 100 to 200 | 15 | |
| < 100 | 20 | 0 |
| Distance to Nearest Municipal | | |
| Well (feet) | | |
| >5280 1320 to 5280 | 0 5 | |
| 500 to 1320 | 10 | |
| <500 | 20 | 0 |
| Distance to Other Wells (feet) | | |
| >1320 | 0 | |
| 300 to 1320 <300 | 10 | • |
| <300 | 20 | 0 |
| Native Soil Type | | |
| Low permeability Mod. permeability | 0 10 | |
| High permeability | 20 | 10 |
| Fluid Type | | |
| Air/mist | 0 | |
| Fresh Water | 5 | |
| TDS >5000 and <10000 TDS >10000 or Oil Base Mud Fluid | 10 | |
| containing significant levels of | 15 | |
| hazardous constituents | 20 | 5 |
| Drill Cuttings | | |
| Normal Rock | 0 | |
| Salt or detrimental | 10 | 0 |
| Annual Precipitation (inches) | | |
| <10 | 0 | |
| 10 to 20 >20 | 5 | _ |
| >20 | 10 | 0 |
| Affected Populations | _ | |
| <10 10 to 30 | 0 6 | |
| 30 to 50 | 8 | |
| >50 | 10 | 0 |
| Presence of Nearby Utility | | |
| Conduits | | |
| Not Present | 0 | |
| Unknown Present | 10 15 | 0 |
| | | |

Final Score 20 (Level III Sensitivity)

Sensitivity Level II = 20 or more; total containment is required.

Sensitivity Level II = 15-19; lining is discretionary.

Sensitivity Level III = below 15; no specific lining is required.

DIVISION OF OIL, GAS AND MINING APPLICATION FOR PERMIT TO DRILL STATEMENT OF BASIS

| OPERATOR: | WESTP0 | ORT OIL AND GAS COMPANY, L.P. | | |
|--|---|--|--|--|
| WELL NAME & NUMBER | R:NBU 921 | -33J | | |
| API NUMBER: | 43-047-36394 | | | |
| LOCATION: 1/4,1/4 <u>NW/S</u> | <u>E</u> Sec: <u>33</u> TWP: _ | 9S RNG: <u>21E</u> <u>1951'</u> FEL <u>2113'</u> FSL | | |
| Geology/Ground Water: | | | | |
| saline water at this location is shows no water wells within a is the Uinta Formation. The | s estimated to be a a 10,000 foot radio Uinta Formation | ing at this location. The depth to the base of the moderately at a depth of 3,400'. A search of Division of Water Rights records us of the center of Section 33. The surface formation at this site is made up of interbedded shales and sandstones. The sandstones ould not be a significant source of useable ground water | | |
| Reviewer: | Dan Jarvis | Date: 4/5/2005 | | |
| Surface: | | | | |
| with SITLA were invited to th | is investigation on | erformed on 4/30/2005. Floyd Bartlett with DWR and Ed Bonner in 3/22/05. Neither agency were in attendance. This site is on State to be the best site for a location in the immediate area. | | |
| Reviewer: <u>D</u> | an Jarvis | Date: 4/5/2005 | | |

Conditions of Approval/Application for Permit to Drill:

- 1. A synthetic liner with a minimum thickness of 20 mils and a felt subliner shall be properly installed and maintained in the reserve pit.
- 2. The entire pad shall be bermed to prevent any fluids from leaving the location.



From:

Ed Bonner

To:

Whitney, Diana 4/6/2005 4:10:32 PM

Date: Subject:

Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

Westport Oil & Gas Company

NBU 921-33F

NBU 921-33G

NBU 921-33I

NBU 921-33J

NBU 921-33K

NBU 921-33P

NBU 921-34H

NBU 921-34K

NBU 921-34L

NBU 1022-121

NBU 1022-12P

State 1021-36A

State 1021-36B

State 1021-36G

State 1021-36H

State 1021-36I

State 1021-36J

State 1021-360

State 1021-36P

If you have any questions regarding this matter please give me a call.

CC:

Garrison, LaVonne; Hill, Brad; Hunt, Gil

Clinton Dworshak - Westport APD(s)

From:

"Upchego, Sheila" <SUpchego@kmg.com>

To:

<cli>tondworshak@utah.gov>

Date:

4/21/2005 4:27 PM **Subject:** Westport APD(s)

Hi Clint, attached are the revised Downhole diagrams for the following well locations:

NBU 921-33F, 921-33G, 921-33I, 921-33J, 921-33K, 921-33P, 921-33O, 921-33N;

NBU 921-34H, 921-34K, 921-34L:

NBU 922-36B

If you have any questions please feel free to contact me at (435) 781-7024 or Brad Laney at (435) 781-7031.

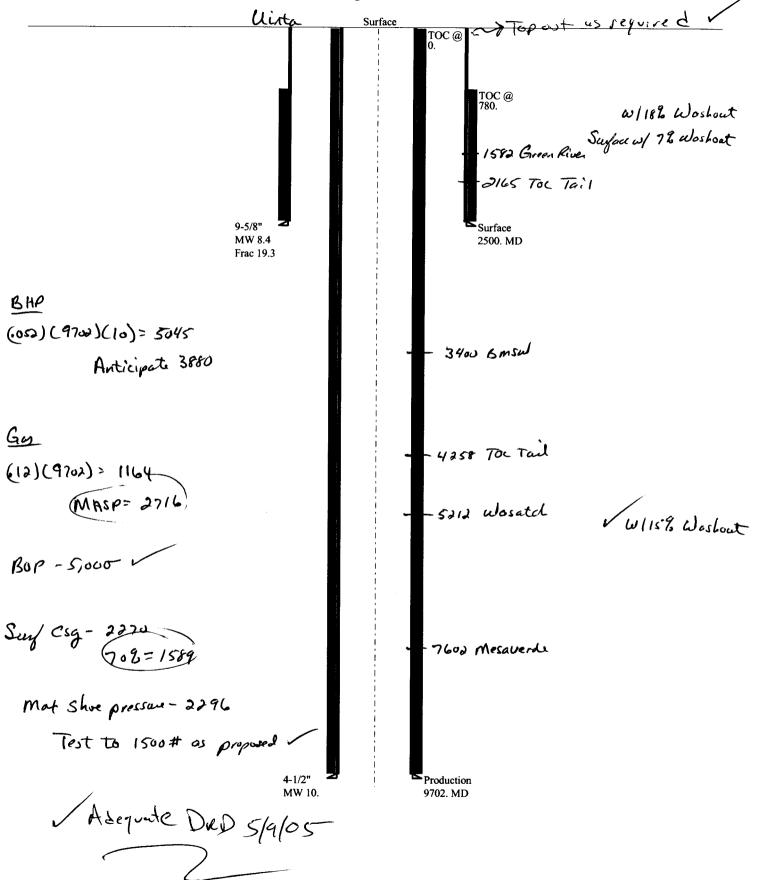
Sheila Upchego <<NBU921-33F_APD(pipeline).xls>> <<NBU921-33G_APD(pipeline).xls>> <<NBU921-33I_APD(pipeline).xls>> <<NBU921-33J_APD(pipeline).xls>> <<NBU921-33K_APD(pipeline).xls>> <<NBU921-33P_APD(pipeline).xls>> <<NBU921-34H_APD(pipeline).xls>> <<NBU921-34K_APD(pipeline).xls>> <<NBU921-34L_APD(pipeline).xls>> <<NBU921-33O_APD (pipeline).xls>> <<NBU921-33N_APD(pipeline).xls>> <<NBU922-36B_DHD_APD.xls>>

Important Notice!!

If you are not the intended recipient of this e-mail message, any use, distribution or copying of the message is prohibited. Please let me know immediately by return e-mail if you have received this message by mistake. then delete the e-mail message.

Thank you.

Casing Schematic



Well name:

04-05 Westport NBU 921-33J

Operator:

Westport Oil & Gas

String type:

Location:

Surface

Uintah County

Project ID:

43-047-36394

Design parameters:

Collapse

Mud weight:

8.400 ppg

Design is based on evacuated pipe.

Minimum design factors: Collapse:

Design factor 1.125 **Environment:**

H2S considered?

Surface temperature: 75 °F 110 °F Bottom hole temperature:

1.40 °F/100ft Temperature gradient: Minimum section length: 1,500 ft

Burst:

Design factor

1.00

1.80 (J)

1.80 (J)

1.60 (J)

Cement top:

780 ft

No

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

2,200 psi 0.120 psi/ft 2,500 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC: **Buttress:**

Premium: 1.50 (J) Body yield: 1.50 (B)

Tension is based on buoyed weight. Neutral point: 2.218 ft

Non-directional string.

Re subsequent strings:

Next setting depth:

9,702 ft 10.000 ppg Next mud weight: Next setting BHP: 5.040 psi Fracture mud wt: 19.250 ppg 2,500 ft

Fracture depth: Injection pressure 2,500 psi

Run Seament Nominal End True Vert Measured Drift Internal Length Size Seq Weight **Finish** Grade Depth Depth Diameter Capacity (ft) (lbs/ft) (in) (ft) (ft) (in) (ft³) 2100 2 9.625 32.30 H-40 ST&C 2100 2100 8.876 133.1 1 400 9.625 36.00 2500 J-55 ST&C 2500 8.796 28.5 Run Collapse Collapse Collapse **Burst** Burst **Burst Tension Tension Tension** Seq Load Strength Design Load Strength Design Load Strength Design (psi) (psi) **Factor** (psi) (psi) **Factor** (Kips) **Factor** (Kips) 2 916 1368 1.492 2452 2270 0.93 72 254 3.52 J 1 1091 2020 1.852 2500 3520 1.41 394 4 92.88 J

Prepared

Clinton Dworshak

Utah Div. of Oil & Mining

Phone: 801-538-5280 FAX: 801-359-3940

Date: April 25,2005 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2500 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

04-05 Westport NBU 921-33J

Operator:

Westport Oil & Gas

String type:

Production

Location:

Uintah County

Project ID:

43-047-36394

Design parameters:

Collapse

Mud weight: Design is based on evacuated pipe.

10.000 ppg

Minimum design factors:

Collapse:

Design factor 1.125 **Environment:**

H2S considered?

Non-directional string.

No 75 °F Surface temperature: 211 °F Bottom hole temperature:

Temperature gradient: 1.40 °F/100ft

Burst:

Design factor

1.00

1.80 (J)

1.80 (J)

1.60 (J)

1.50 (J)

1.50 (B)

Cement top:

Surface

Burst

Max anticipated surface

pressure: Internal gradient: 1,766 psi 0.337 psi/ft

Calculated BHP 5,040 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC: **Buttress:**

Premium:

Body yield:

Tension is based on buoyed weight.

Minimum section length: 1.500 ft

Neutral point: 8,252 ft

| Run Seq | Segment Length | Size | Nominal Weight | Grade | End Finish | True Vert Depth | Measured Depth | Drift Diameter | Internal Capacity |
|------------|---------------------|-------------------|-------------------|---------------|-------------------|---------------------|---------------------|--------------------|----------------------|
| 1 | (ft) 9702 | (in) 4.5 | (lbs/ft) 11.60 | M-80 | LT&C | (ft) 9702 | (ft) 9702 | (in) 3.875 | (ft³) 224.9 |
| Run | Collapse | Collapse | Collapse | Burst | Burst | Burst | Tension | Tension | Tension |
| Seq | Load (psi) | Strength (psi) | Design Factor | Load (psi) | Strength (psi) | Design Factor | Load (Kips) | Strength (Kips) | Design Factor |
| 1 | 5040 | 6350 | 1.260 | 5040 | 7780 | 1.54 | 96 | 267 | 2.79 B |

Prepared

Clinton Dworshak

Utah Div. of Oil & Mining

Phone: 801-538-5280 FAX: 801-359-3940

Date: April 25,2005 Salt Lake City, Utah

by: Remarks:

Collapse is based on a vertical depth of 9702 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.



State of Utah

Department of Natural Resources

> MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT Lieutenant Governor

May 10, 2005

Westport Oil & Gas Company, LP 1368 South 1200 East Vernal, Utah 84078

Re:

Natural Buttes Unit 921-33J Well, 2113' FSL, 1951' FEL, NW SE, Sec. 33, T. 9 South, R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-36394.

Sincerely.

Gil Hunt

Acting Associate Director

pab Enclosures

cc:

Uintah County Assessor

SITLA

Bureau of Land Management, Vernal District Office

| Operator: | Westport Oil & Gas Company, LP | |
|--------------------|--------------------------------|--|
| Well Name & Number | Natural Buttes Unit 921-33J | |
| API Number: | 43-047-36394 | |
| Lease: | STUO-015630-ST | |
| | | |

T. 9 South

R. 21 East

Conditions of Approval

Sec. 33

1. General

Location: NW SE

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

Page 2 API #43-047-36394 May 10, 2005

6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vernal District Office 170 South 500 East Vernal, Utah 84078-2799

Phone: (801) 781-4400

Fax: (801) 781-4410

IN REPLY REFER TO: 3160 UT08300

July 11, 2005

Westport Oil & Gas Company ATTN: Debra Domenici P.O. Box 1148 Vernal, Utah 84078 RECEIVED JUL 1 2 2005

DIV. OF OIL, GAS & MINING

RE: Application for Permit to Drill Well No.: NBU 921-33J NWSE, Sec. 33, T9S, R21E Natural Buttes Unit API No. 43-047-36394

Dear Ms. Domenici:

Enclosed is your copy for the above referenced APD that we accepted for "Unit Purposes Only".

If you have any questions, please contact me at (435) 781-4429.

Sincerely,

Johnetta Magee

Legal Instruments Examiner

Enclosure

bcc: Well File

Reading File

Division of Oil-Gas-Mining

RECEIVED

| | | STATE OF UTAH DEPARTMENT OF NATURAL RESOUR | - | ADD 1.7 2006 | ע | FORM 9 |
|----------|---|--|--|--|---------------|--|
| | 1 | DIVISION OF OIL, GAS AND MI | | APR 1 7 2006 | | SE DESIGNATION AND SERIAL NUMBER: JO-015630-ST |
| | SUNDRY | NOTICES AND REPORT | S ON WEL | .LS | 6. IF IN | IDIAN, ALLOTTEE OR TRIBE NAME: |
| Do | not use this form for proposals to drill n drill horizontal la | ew wells, significantly deepen existing wells below cur terals. Use APPLICATION FOR PERMIT TO DRILL I | rrent bottom-hole de form for such propos | oth, reenter plugged wells, or to als. | | TOP CA AGREEMENT NAME. FURAL BUTTES UNIT |
| 1. T | YPE OF WELL OIL WELL | | | | | L NAME and NUMBER: J 921-33J |
| | AME OF OPERATOR: ERR MCGEE OIL AND (| GAS ONSHORE LP | | | | NUMBER: 4736394 |
| | DDRESS OF OPERATOR: 58 SOUTH 1200 EAST | , VERNAL STATE UT DE | ,84078 | PHONE NUMBER: (435) 781-7003 | | LD AND POOL, OR WILDCAT: FURAL BUTTES |
| F | DOCATION OF WELL DOTAGES AT SURFACE: 2113' I TRIQTR, SECTION, TOWNSHIP, RAN | | 21E | | COUNT | Y: UINTAH UTAH |
| 11. | CHECK APPF | ROPRIATE BOXES TO INDICAT | TE NATURE | OF NOTICE, REPOR | RT, O | R OTHER DATA |
| | TYPE OF SUBMISSION | | 1 | YPE OF ACTION | | |
| V | NOTICE OF INTENT (Submit in Duplicate) | ACIDIZE ALTER CASING | DEEPEN FRACTURI | E TREAT | | REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL |
| | Approximate date work will start: | CASING REPAIR | NEW CON | STRUCTION | | TEMPORARILY ABANDON |
| | | CHANGE TO PREVIOUS PLANS | OPERATO | R CHANGE | | TUBING REPAIR |
| | | CHANGE TUBING | PLUG AND | ABANDON | | VENT OR FLARE |
| Ш | SUBSEQUENT REPORT (Submit Original Form Only) | CHANGE WELL NAME | PLUG BAC | К | | WATER DISPOSAL |
| | Date of work completion: | CHANGE WELL STATUS | | ON (START/RESUME) | 닏 | WATER SHUT-OFF |
| | | COMMINGLE PRODUCING FORMATIONS CONVERT WELL TYPE | | TION OF WELL SITE ETE - DIFFERENT FORMATION | \checkmark | OTHER: DOGM APD EXTENSION |
| 12. | DESCRIBE PROPOSED OR CO | MPLETED OPERATIONS. Clearly show all p | pertinent details ir | cluding dates, depths, volume | es, etc. | |
| SC | HE OPERATOR REQUE O THAT THE DRILLING | STS AUTHORIZATION FOR AN OPERATIONS MAY BE COMP ON MAY 10, 2005. | N ONE YEAF LETED. THE | R EXTENSION FOR T CORIGINAL APD WA | THE S S AP | SUBJECT WELL LOCATION. PROVED BY THE BUREAU |

Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

| NAME (PLEASE PRINT) RAMEY HOOPES | TITLE REGULATORY CLERK |
|----------------------------------|------------------------|
| SIGNATURE TOMMEN HOUDES | DATE 4/11/2006 |
| (This areas (a State up early) | · |

ACCEPTED BY BLM FOR UNIT PURPOSES ONLY

MAY - 2 2005

MAY 0 8 2006



Division of Oil, Gas and Mining OPERATOR CHANGE WORKSHEET

ROUTING

1. DJJ

2. CDW

X Change of Operator (Well Sold)

Operator Name Change/Merger

| The operator of the well(s) listed below has changed, effective: | | | 1/6/2006 | | |
|---|------------------|---------------|----------------|--------------|----------------|
| FROM: (Old Operator): | TO: (New O | | | | |
| N2115-Westport Oil & Gas Co., LP | N2995-Kerr-M | | . Gas Onshor | e. LP | |
| 1368 South 1200 East | | outh 1200 | | -, | |
| Vernal, UT 84078 | | , UT 84078 | | | |
| Phone: 1-(435) 781-7024 | Phone: 1-(435) | | | | |
| CA No. | Unit: | | ATURAL B | UTTES | UNIT |
| WELL NAME SEC TWN RNG | API NO | ENTITY NO | 1 | WELL TYPE | WELL STATUS |
| OPERATOR CHANGES DOCUMENTATION | | | | | |
| Enter date after each listed item is completed | | | | | |
| 1. (R649-8-10) Sundry or legal documentation was received from the | FORMER ope | rator on: | 5/10/2006 | | |
| 2. (R649-8-10) Sundry or legal documentation was received from the | - | | 5/10/2006 | | |
| 3. The new company was checked on the Department of Commerce | - | | s Database o | n: | 3/7/2006 |
| • | Business Numb | - | 1355743-018 | | |
| 4b. If NO, the operator was contacted contacted on: | , | | | | |
| 5a. (R649-9-2)Waste Management Plan has been received on: | IN PLACE | | | | |
| 5b. Inspections of LA PA state/fee well sites complete on: | n/a | 3 LA well: | s & all PA w | ells trans | sferred |
| 5c. Reports current for Production/Disposition & Sundries on: | ok | • | | | |
| 6. Federal and Indian Lease Wells: The BLM and or the B | SIA has appro | ved the n | nerger, nan | e chan | ge, |
| or operator change for all wells listed on Federal or Indian leases o | | BLM | 3/27/2006 | - | not yet |
| 7. Federal and Indian Units: | | | | | |
| The BLM or BIA has approved the successor of unit operator for | wells listed on: | | 3/27/2006 | | |
| 8. Federal and Indian Communization Agreements (" | CA"): | | | | |
| The BLM or BIA has approved the operator for all wells listed w | rithin a CA on: | | n/a | | |
| a | vision has appro | | - | fer of A | uthority to |
| Inject, for the enhanced/secondary recovery unit/project for the wa | ter disposal wel | l(s) listed o | n; | | |
| DATA ENTRY: | | | | | |
| 1. Changes entered in the Oil and Gas Database on: | 5/15/2006 | | | | |
| 2. Changes have been entered on the Monthly Operator Change Sp | | | 5/15/2006 | | |
| 3. Bond information entered in RBDMS on:4. Fee/State wells attached to bond in RBDMS on: | 5/15/2006 | • | | | |
| 5. Injection Projects to new operator in RBDMS on: | 5/16/2006 | • | | | |
| 6. Receipt of Acceptance of Drilling Procedures for APD/New on: | | n∕a | Name Chang | vo Only | |
| BOND VERIFICATION: | | 11/ a | Name Chang | ge Omy | . : |
| Federal well(s) covered by Bond Number: | CO1203 | | | | |
| 2. Indian well(s) covered by Bond Number: | RLB0005239 | • | | | |
| 3. (R649-3-1) The NEW operator of any fee well(s) listed covered by | | • | RLB0005236 | i | |
| a. The FORMER operator has requested a release of liability from the | | n/a | rider added | | |
| The Division sent response by letter on: | . cond on. | 11/4 | | | |
| LEASE INTEREST OWNER NOTIFICATION: | | • | | | |
| 4. (R649-2-10) The FORMER operator of the fee wells has been contained. | acted and inform | ned by a let | ter from the I | Division | |
| of their responsibility to notify all interest owners of this change on: | | 5/16/2006 | | | |
| COMMENTS: | | | | | |
| | | | | | |

4 Form 3 160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OMB No. 1004-0135 Expires Jnovember 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

5. Lease Serial No.

| MULTIPLE | LEASES |
|----------|--------|
| | |

| | form for proposals to Use Form 3160-3 (APD) | | | |
|--|--|---|--|--|
| SUBMIT IN TRIPL | ICATE – Other instruc | ctions on reverse s | 7. If Unit or CA/Agreement, Name and/or No. | |
| I. Type of Well Oil Well X Gas Well | Other | | 8. Well Name and No. | |
| 2. Name of Operator | | | MUTIPLE WELLS | |
| KERR-McGEE OIL & GAS C | DNSHORE LP | | 9. API Well No. | |
| 3a. Address | | 3b. Phone No. (include a | area code) | |
| 1368 SOUTH 1200 EAST V | 'ERNAL, UT 84078 | (435) 781-7024 | 10. Field and Pool, or Exploratory Area | |
| 4. Location of Well (Footage, Sec., | T., R., M., or Survey Description | n) | | |
| | | | 11. County or Parish, State | |
| SEE ATTACHED | | | UINTAH COUNTY, UTAH | |
| 12. CHECK APP | ROPRIATE BOX(ES) TO I | NDICATE NATURE OF | F NOTICE, REPORT, OR OTHER DATA | |
| TYPE OF SUBMISSION | | TYPE | OF ACTION | |
| Notice of Intent Acidize Deepen Production (Start/Resume) Water Shut-Off Alter Casing Fracture Treat Reclamation Well Integrity | | | | |
| Subsequent Report | Casing Repair Change Plans | New Construction Plug and Abandon | Recomplete | |
| Final Abandonment Notice | Convert to Injection | Plug Back | Water Disposal | |
| Attach the Bond under which the wor following completion of the involved | rk will be performed or provide the operations. If the operation result bandonment Notices shall be filed | ne Bond No. on file with BLM s in a multiple completion or | measured and true vertical depths of all pertinent markers and zones. LM/BIA Required subsequent reports shall be filed within 30 days or recompletion in a new interval, a Form 3160-4 shall be filed once, including reclamation, have been completed, and the operator has | |
| OPERATOR OF THE ATTAI KERR-McGEE OIL & GAS CO OF THE LEASE(S) FOR TH IS PROVIDED BY STATE O BLM B B/A | CHED WELL LOCATIONSHORE LP, IS RESPONDED ON CONTROL OF UTAH NATIONWIDE ON CONTROL ON CON | NS. EFFECTIVE JA PONSIBLE UNDER T DUCTED UPON LEA BOND NO. RLB000 APP | TERMS AND CONDITIONS MAY 1 0 2006 ASE LANDS. BOND COVERAGE 05237. PROVED 5/6/06 OTIME Russell | |
| 14. I hereby certify that the foregoing | g is true and correct | Earlen | ion of Oil, Cas and Mining ne Russell, Engineering Technician | |
| Name (Printed/Typed) RANDY BAYNE | | DRILLING MANA | - - | |
| Signature Sayne | | Date May 9, 2006 | | |
| | THIS SPACE | FOR FEDERAL OR STA | ATE USE | |
| Approved by | | Title | Date | |
| Conditions of approval, if any, are attached certify that the applicant holds legal or equi which would entitle the applicant to conduct | itable title to those rights in the subje | arrant or Office | | |

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3 160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OMB No. 1004-0135 Expires Inovember 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

5. Lease Serial No. MULTIPLE LEASES

5-9-06

| | s form for proposals to Use Form 3160-3 (APD | | 6. If Indian, Allottee or Tribe Name | | |
|---|--|--|---|--|--|
| SUBMIT IN TRIPL | SUBMIT IN TRIPLICATE – Other instructions on reverse side | | | | |
| I. Type of Well | | | | | |
| Oil Well X Gas Well 2. Name of Operator | Other | | 8. Well Name and No. | | |
| • | | | MUTIPLE WELLS | | |
| WESTPORT OIL & GAS CO | OMPANY L.P. | | 9. API Well No. | | |
| 3a. Address | (TT) (A) (M) (T) (T) | 3b. Phone No. (include area code) | | | |
| 1368 SOUTH 1200 EAST \ | /ERNAL, UT 84078 | (435) 781-7024 | 10. Field and Pool, or Exploratory Area | | |
| 4. Location of Well (Footage, Sec., | T., R., M., or Survey Description | on) | | | |
| SEE ATTACHED | | | 11. County or Parish, State | | |
| SEE ATTACHED | | | UINTAH COUNTY, UTAH | | |
| 12 CUECK ARE | NOODEL TO DOLLEO MO | | <u> </u> | | |
| | ROPRIATE BOX(ES) TO | INDICATE NATURE OF NOTICE, I | REPORT, OR OTHER DATA | | |
| TYPE OF SUBMISSION | | TYPE OF ACTION | V | | |
| Notice of Intent | ☐ Acidize | Deepen Production | (Start/Resume) Water Shut-Off | | |
| | Alter Casing | Fracture Treat Reclamation | | | |
| Subsequent Report | Casing Repair | New Construction Recomple | | | |
| | Change Plans | | ly Abandon OPERATOR | | |
| Final Abandonment Notice | Convert to Injection | Plug Back Water Dis | | | |
| Attach the Bond under which the wo following completion of the involved | any or recomplete nonzontally, gar rk will be performed or provide a operations. If the operation resur- bandonment Notices shall be file | ive subsurface locations and measured and the the Bond No. on file with BLM/BIA. Requirely in a multiple completion or recompletion. | my proposed work and approximate duration thereof, we vertical depths of all pertinent markers and zones, ared subsequent reports shall be filed within 30 days in a new interval, a Form 3160-4 shall be filed once amation, have been completed, and the operator has | | |
| EFFECTIVE JANUARY 6, 2 THE OPERATORSHIP OF T ONSHORE LP. | THE ATTACHED WELL | & GAS COMPANY L.P., HAS R LOCATIONS TO KERR-MCGE | ELINQUISHED EE OIL & GAS | | |
| | ALLN | OVED 5/6/06 | RECEIVED | | |
| | Ċa | ulone Russell | | | |
| | DIVISION | Of Util time and Minime | MAY 1 0 2006 | | |
| | Earlene l | Russell, Engineering Technician | 1 | | |
| 14. I hereby certify that the foregoin | | | DIV OF OIL, GAS & MINING | | |
| Name (Printed/Typed) | 5 is true and confect | l Title | | | |
| BRAD LANEY | | ENGINEERING SPECIALIS | Т | | |
| Signature | | Date | | | |
| | | May 9, 2006 | | | |
| | THIS SPACE | FOR FEDERAL OR STATE USE | | | |

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Title

Office

Conditions of approval, if any, are attacked. Approval of this notice does not warrant or certify that the applicant holds legal of equitable fitle to those rights in the subject lease

which would entitle the applicant to conduct operations thereon.

Approved by

STATE OF UTAH

FORM 9

| DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS AND MIN | CES ING | 6, LEASE DESIGNATION AND SERIAL NUMBER: STUO-015630-ST |
|---|---|---|
| SUNDRY NOTICES AND REPORTS | ON WELLS | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| Do not use this form for proposals to drill new wells, significantly deepen existing walk below curre drill nonizontal betords. Use APPLICATION FOR PERMIT TO DRILL for | to hottoro-hole deptit, contac plubbed wells, or to | 7. UNIT OF CA AGREEMENT NAME: NATURAL BUTTES UNIT |
| WIND OF WELL ATHER | 11101000 | 6. WELL NAME and NUMBER: NBU 921-33J |
| 1. TYPE OF WELL OIL WELL GAS WELL OTHER | | 9. API NUMBER: |
| 2. NAME OF OPERATOR: | | 4304736394 |
| KERR MCGEE OIL AND GAS ONSHORE LP | PHONE NUMBER: (435) 781-7003 | 10, FIELD AND POOL, OR WILDCAT: NATURAL BUTTES |
| 3. ADDRESS OF OPERATOR 1368 SOUTH 1200 EAST CALLY VERNAL STATE UT 200 EAST 4. LOCATION OF WELL FOOTAGES AT SURFACE: 2113' FSL 1951' FEL | 4076 (40077017000 | COUNTY: UINTAH |
| QTRIQTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 33 9S 2 | 1E | STATE: UTAH |
| CHECK APPROPRIATE BOXES TO INDICAT | E NATURE OF NOTICE, REPO | RT, OR OTHER DATA |
| TYPE OF SUBMISSION | TYPE OF ACTION | REPERFORATE CURRENT FORMATION |
| ACIDIZE | DEMPEN | SIDETRACK TO REPAIR WELL |
| NOTICE OF INTENT (Submit in Duplicate) ALTER CASING | FRACTURE TREAT | TEMPORARILY ABANDON |
| Approximate date work will start: CASING REPAIR | NEW CONSTRUCTION | TURING REPAIR |
| CHANGE TO PREVIOUS PLANS | OPERATOR CHANGE | VENT OR FLARE |
| CHANGE TURING | PLUG AND ABANDON | |
| SUBSEQUENT REPORT CHANGE WELL NAME | PLUG BACK | WATER DISPOSAL |
| (Submit Original Form Only) CHANGE WELL STATUS | PRODUCTION (START/RESUME) | WATER SHUT-OFF |
| Date of work completion: COMMINGLE PRODUCING FORMATIONS | RECLAMATION OF WELL SITE | OTHER DOGMAPD EXTENSION |
| CONVERT WELL TYPE | RECOMPLETE - DIFFERENT FORMATION | EXTENSION |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all | pertinent details including dates, depths, volum | nes, etc. |
| THE OPERATOR REQUESTS AUTHORIZATION FOR AN SO THAT THE DRILLING OPERATIONS MAY BE COMP OF LAND MANAGEMENT ON MAY 10, 2005. | A ONE VEAD EVIENSION FOR | THE SUBJECT WELL LOOKING. |
| Ap Ut Oil, Date: S CHO By: — | proved by the an Division of Gas and Mining | |
| NAME (PLEASE POINT) RAMEY HOOPES | TIYLE REGULATORY | / CLERK |
| (This space for State use only) | | - |

RECEIVED

MAY 3 0 2006

Application for Permit to Drill Request for Permit Extension Validation

(this form should accompany the Sundry Notice requesting permit extension)

| API: 4304736394 Well Name: NBU 921-33J Location: NWSE, SEC 33-T9S-R21E Company Permit Issued to: KERR MCGEE OIL AND GAS ONSHORE LP Date Original Permit Issued: 5/10/200 |
|---|
| The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. |
| Following is a checklist of some items related to the application, which should be verified. |
| If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes □ No ☑ |
| Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☑ |
| Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes□ No ☑ |
| Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes□No ☑ |
| Has the approved source of water for drilling changed? Yes⊡ No☑ |
| Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes□No☑ |
| Is bonding still in place, which covers this proposed well? Yes ☑ No ☐ |
| Eignature Date |
| Title: REGULATORY CLERK |
| Representing: KERR MCGEE OIL AND GAS ONSHORE L |

RECEIVED

MAY 3 0 2006

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

| Name of Company: | KERR-M | cGEE OIL & | GAS ONSI | HORE LP |
|---------------------|--------------------|--------------|----------|---------|
| Well Name: | NBU 921 | -33J | | |
| Api No: 43-047-3 | 6394 | _Lease Type: | STAT | TE |
| Section 33 Township | p <u>09S</u> Range | e 21E | _County | UINTAH |
| Drilling Contractor | PETE MART | ΓIN | RIG #_ | BUCKET |
| SPUDDED: Date | 09/23/06 | | | |
| Time | NOON | √ | | |
| How | DRY | | | |
| Drilling will Comme | ence: | | | |
| Reported by | LOU WEL | DON | | |
| Telephone # | (435) 828-7 | 7035 | | |
| Date 09/25/06 Si | aned C | НD | | |

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

1368 SOUTH 1200 EAST

city VERNAL

state UT

Phone Number: (435) 781-7024

Well 1

| API Number | Well | Name | QQ | Sec | Twp | Rng | County |
|-------------|--------------------------|----------------------|------|---------|-----|-----|------------------------------|
| 4304737211 | BONANZA 1023-6N | | SESW | 6 | 108 | 23E | UINTAH |
| Action Code | Current Entity Number | New Entity Number | 8 | pud Da | te | | y Assignment fective Date |
| A | 99999 | 15672 | 8 | /22/200 | 6 | | 9/28/00 |

zio 84078

MIRU PETE MARTIN BUCKET RIG. $\omega \circ / \prime \iota \nu \cup$ SPUD WELL LOCATION ON 09/22/2006 AT 1330 HRS.

Well 2

| | NANZA 1023-6L | | ANACON | | | | |
|--------------|--------------------------|----------------------|--------|---------|-----|-----|------------------------------|
| Action Code | | | NWSW | 6 | 108 | 23E | UINTAH |
| Activit code | Current Entity Number | New Entity Number | Sı | oud Da | te | | y Assignment fective Date |
| A | 99999 | 15673 | 9 | /22/200 | 6 | 9 | 1/28/06 |

Well 3

| API Number | Well | Name | QQ | Sec | Twp | Rng | County |
|-------------|--------------------------|----------------------|------|---------|-----|-------------------------------------|--------|
| 4304736394 | NBU 921-33J | | NWSE | 33 | 95, | 21E | UINTAH |
| Action Code | Current Entity Number | New Entity Number | S | pud Da | te | Entity Assignment Effective Date | |
| B | 99999 | 2900 | 9 | /23/200 | 6 | 9 | 128/06 |
| omments: | | 1.1 < 4 | 41/1 | | | • | , |

MIRU PETE MARTIN BUCKET RIG. WSTHVD SPUD WELL LOCATION ON 09/23/2006 AT 1200 HRS

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

(6/2000) Co./Dept.

REGULATORY ANALYST 9/25/2006

> RECEIVED SEP 2 5 2006

DIV. OF OIL, GAS & MINING

STATE OF UTAH

| DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING | 5. LEASE DESIGNATION AND SERIAL NUMBER: STUO-015630-ST | | | | |
|--|--|--|--|--|--|
| SUNDRY NOTICES AND REPORTS ON V | 6 IE INDIANI ALL OTTEE OR TRIBE NAME | | | | |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-h drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such a supplied of the control | 7. UNIT or CA AGREEMENT NAME: | | | | |
| 2. NAME OF OPERATOR: | 9. API NUMBER: | | | | |
| KERR McGEE OIL & GAS ONSHORE LP | 4304736394 | | | | |
| 3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST OUTY VERNAL STATE UT 21P 84078 | PHONE NUMBER: 10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES | | | | |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 2113'FSL, 1951'FEL | COUNTY: UINTAH | | | | |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 33 9S 21E | STATE: UTAH | | | | |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATU | IRE OF NOTICE, REPORT, OR OTHER DATA | | | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | | | | |
| NOTICE OF INTENT | PEN REPERFORATE CURRENT FORMATION | | | | |
| | CTURE TREAT SIDETRACK TO REPAIR WELL | | | | |
| Approximate date work will start: CASING REPAIR NEW | CONSTRUCTION TEMPORARILY ABANDON | | | | |
| CHANGE TO PREVIOUS PLANS DPE | RATOR CHANGE TUBING REPAIR | | | | |
| | G AND ABANDON VENT OR FLARE | | | | |
| SUBSEQUENT REPORT CHANGE WELL NAME PLUI | G BACK WATER DISPOSAL | | | | |
| | DUCTION (START/RESUME) WATER SHUT-OFF | | | | |
| | LAMATION OF WELL SITE | | | | |
| CONVERT WELL TYPE REC | OMPLETE - DIFFERENT FORMATION | | | | |
| MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR W/ 28 SX READY MIX. SPUD WELL LOCATION ON 09/23/2006 AT 1200 HRS | | | | | |
| NAME (PLEASE PRINT) SHEILA UPCHEGO | TITLE REGULATORY ANALYST | | | | |
| SIGNATURE //////////////////////////////////// | 9/25/2006 | | | | |
| | | | | | |

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STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES 5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND MINING STUO-015630-ST 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. NATURAL BUTTES UNIT 8. WELL NAME and NUMBER: 1. TYPE OF WELL GAS WELL OIL WELL OTHER NBU 921-33J 2. NAME OF OPERATOR 9 API NUMBER: 4304736394 KERR McGEE OIL AND GAS ONSHORE LP PHONE NUMBER: 10. FIELD AND POOL, OR WILDCAT: 3. ADDRESS OF OPERATOR: CITY VERNAL STATE UT 7112 84078 NATURAL BUTTES 1368 SOUTH 1200 EAST (435) 781-7003 4. LOCATION OF WELL COUNTY: UINTAH FOOTAGES AT SURFACE: 2113' FSL 1951' FEL STATE QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 33 9S 21E UTAH CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF ACTION TYPE OF SUBMISSION REPERFORATE CURRENT FORMATION DEEPEN ACIDIZE NOTICE OF INTENT SIDETRACK TO REPAIR WELL FRACTURE TREAT (Submit in Duplicate) ALTER CASING TEMPORARILY ABANDON Approximate date work will start: CASING REPAIR NEW CONSTRUCTION CHANGE TO PREVIOUS PLANS OPERATOR CHANGE TUBING REPAIR VENT OR FLARE CHANGE TUBING PLUG AND ABANDON SUBSEQUENT REPORT WATER DISPOSAL CHANGE WELL NAME PLUG BACK (Submit Original Form Only) WATER SHUT-OFF PRODUCTION (START/RESUME) CHANGE WELL STATUS Date of work completion: OTHER: SET SURF CSG COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE 10/2/2006 RECOMPLETE - DIFFERENT FORMATION CONVERT WELL TYPE 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU BILL JR'S RATHOLE DRILLING ON 9/23/06. DRILLED 12 1/4" SURFACE HOLE TO 2550'. RAN 9 5/8" 61 JTS H-40 32.3#. TAILED CMT W/200 SX PREM CLASS G @ 15.8 PPG 1.15 YIELD. TOP OUT W/125 SX CLASS G @ 15.8 PPG 1.15 YIELD, CMT 1ST STAGE WITH 230 SX LEAD AND 200 SX TAIL SOME RETURNS TO PIT NO CMT TO PIT.1" PIPE NO CMT TO SURFACE WOC. 2ND TOP JOB W/125 SX DOWN BACKSIDE, GOOD CMT TO SURFACE AND STAYED AT SURFACE, WORT, REGULATORY CLERK RAMEY HOOPES NAME (PLEASE PRINT) 10/3/2006

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STATE OF UTAH IMENT OF NATURAL RESOURCES

| DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING | 5. LEASE DESIGNATION AND SERIAL NUMBER: STUO-015630-ST |
|--|--|
| SUNDRY NOTICES AND REPORTS ON WELLS | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reented in the drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | |
| 1. TYPE OF WELL OIL WELL GAS WELL 🗸 OTHER | 8. WELL NAME and NUMBER: NBU 921-33J |
| 2. NAME OF OPERATOR: | 9. API NUMBER: |
| KERR McGEE OIL AND GAS ONSHORE LP | 4304736394 NUMBER: 10. FIELD AND POOL, OR WILDCAT: |
| 3. ADDITESS OF OFFICE OFF | 5) 781-7003 NATURAL BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 2113' FSL 1951' FEL | COUNTY: UINTAH |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 33 9S 21E | STATE: UTAH |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF N | OTICE, REPORT, OR OTHER DATA |
| TYPE OF SUBMISSION TYPE O | FACTION |
| NOTICE OF INTENT | REPERFORATE CURRENT FORMATION |
| (Submit in Duplicate) ALTER CASING FRACTURE TREAT | SIDETRACK TO REPAIR WELL |
| Approximate date work will start: CASING REPAIR NEW CONSTRUCTI | |
| CHANGE TO PREVIOUS PLANS OPERATOR CHANGE | |
| CHANGE TUBING PLUG AND ABANDO | |
| SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK (Submit Original Form Only) | WATER DISPOSAL |
| Date of work completion: | |
| COMMINGLE PRODUCING FORMATIONS RECLAMATION OF | |
| CONVERT WELL TYPE | FERENT FORMATION |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including | |
| MIRU BILL JR'S RATHOLE DRILLING ON 9/23/06. DRILLED 12 1/4" SURF H-40 32.3#. TAILED CMT W/200 SX PREM CLASS G @ 15.8 PPG 1.15 YIE 1.15 YIELD, CMT 1ST STAGE WITH 230 SX LEAD AND 200 SX TAIL SOM CMT TO SURFACE WOC. 2ND TOP JOB W/125 SX DOWN BACKSIDE, GSURFACE. WORT. | ELD. TOP OUT W/125 SX CLASS G @ 15.8 PPG IE RETURNS TO PIT NO CMT TO PIT.1" PIPE NO |
| NAME (PLEASE PRINT) | EGULATORY CLERK |
| SIGNATURE MANUAL MATE 1 | 0/3/2006 |
| (This space for State use only) | |

STATE OF UTAH

| DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER: | | | | | |
|--|--|---|--|--|--|
| | | STUO-015630-ST | | | |
| SUNDRY | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | | | |
| Do not use this form for proposals to drill ne | w wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to erals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 7. UNIT OF CA AGREEMENT NAME: UNIT #891008900A | | | |
| 1. TYPE OF WELL OIL WELL | | 8. WELL NAME and NUMBER: NBU 921-33J | | | |
| 2. NAME OF OPERATOR: KERR McGEE OIL & GAS | ONSHORE LP | 9. API NUMBER: 4304736394 | | | |
| 3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST | VERNAL STATE UT ZIP 84078 PHONE NUMBER: (435) 781-7024 | 10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES | | | |
| 4. LOCATION OF WELL | | | | | |
| FOOTAGES AT SURFACE: 2113'F | SL, 1951'FEL | COUNTY: UINTAH | | | |
| QTR/QTR, SECTION, TOWNSHIP, RANG | se, meridian: NWSE 33 9S 21E | STATE: UTAH | | | |
| 11. CHECK APPR | OPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO | RT, OR OTHER DATA | | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | | | | |
| NOTICE OF INTENT | ACIDIZE DEEPEN | REPERFORATE CURRENT FORMATION | | | |
| NOTICE OF INTENT (Submit in Duplicate) | ALTER CASING FRACTURE TREAT | SIDETRACK TO REPAIR WELL | | | |
| Approximate date work will start: | CASING REPAIR NEW CONSTRUCTION | TEMPORARILY ABANDON | | | |
| | CHANGE TO PREVIOUS PLANS OPERATOR CHANGE | TUBING REPAIR | | | |
| | CHANGE TUBING PLUG AND ABANDON | VENT OR FLARE | | | |
| SUBSEQUENT REPORT | CHANGE WELL NAME PLUG BACK | WATER DISPOSAL | | | |
| (Submit Original Form Only) | CHANGE WELL STATUS PRODUCTION (START/RESUME) | WATER SHUT-OFF | | | |
| Date of work completion: | COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE | ✓ OTHER: SIDE TRACK | | | |
| | CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION | | | | |
| 12. DESCRIBE PROPOSED OR CO | MPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume | es, etc. | | | |
| NBU 921-33J subsequent | sidetrack information | | | | |
| | was decided to stop fishing operations and sidetrack the subject v il approval was received from Dave Hackford with UDOGM. | vell. After attempting to contact the | | | |
| when attempting to establi- the hole. The bottom fish | 00'(TD) after encountering a water flow at ±9450'. The drill string sh circulation at that depth, the well bore collapsed. After fishing included a bit, mud motor, 18 drill collars, 3 joints of heavy weigh rill pipe. The top of the fish was at 6031'. | for ± 2 weeks, two fish were left in | | | |
| The hole was then filled wi of .93. Sidetrack operation | th cement from the top of the fish at 6031' to 5330' with 710 sx of as were started on 11/14. As of 11/20/06, the well is at 7636' and | 17.5 ppg cement with a yield drilling ahead | | | |
| | | | | | |

NAME (PLEASE PRINT) SHEILA UPCHEGO
TITLE SENIOR LAND ADMIN SPECIALIST

DATE 11/21/2006

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Accepted by the

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STATE OF UTAH

| 1 | DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS AND MIN | | | | SE DESIGNATION AND SERIAL NUMBER: | | |
|--|---|-----------------------------|----------------------------------|----------------|---|--|--|
| SUNDRY | Y NOTICES AND REPORTS | ON WEL | LS | 6. IF IN | IDIAN, ALLOTTEE OR TRIBE NAME: | | |
| Do not use this form for proposals to drill n | new wells, significantly deepen existing wells below curr aterals. Use APPLICATION FOR PERMIT TO DRILL fo | ent bottom-hole depl | th, reenter plugged wells, or to | | or CA AGREEMENT NAME: T #891008900A | | |
| 1. TYPE OF WELL OIL WELL GAS WELL OTHER OTHER | | | | 1 | 8. WELL NAME and NUMBER: NBU 921-33J | | |
| 2. NAME OF OPERATOR: | | | | | NUMBER: | | |
| KERR McGEE OIL & GAS | S ONSHORE LP | | | 1 | 4736394 | | |
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| 4. LOCATION OF WELL | | - | | | | | |
| FOOTAGES AT SURFACE: 2113'F | FSL, 1951'FEL | | | COUNT | COUNTY: UINTAH | | |
| QTR/QTR, SECTION, TOWNSHIP, RAN | NGE, MERIDIAN: NWSE 33 9S 2 | 1E | | STATE: UTAH | | | |
| CHECK VDD | ROPRIATE BOXES TO INDICAT | ENATURE | OF NOTICE REPO | RT O | R OTHER DATA | | |
| | ROPRIATE BOXES TO INDICAT | | YPE OF ACTION | /((1, O | KOMEKBAIA | | |
| TYPE OF SUBMISSION | ACIDIZE | DEEPEN | THE OF ACTION | $\neg \neg$ | REPERFORATE CURRENT FORMATION | | |
| NOTICE OF INTENT (Submit in Duplicate) | ALTER CASING | FRACTURE | TREAT | | SIDETRACK TO REPAIR WELL | | |
| Approximate date work will start: | CASING REPAIR | NEW CONS | | | TEMPORARILY ABANDON | | |
| Approximate date work will start. | CHANGE TO PREVIOUS PLANS | OPERATOR | | | TUBING REPAIR | | |
| | CHANGE TUBING | PLUG AND | | | VENT OR FLARE | | |
| SUBSEQUENT REPORT | | PLUG BACK | | 片 | WATER DISPOSAL | | |
| SUBSEQUENT RÉPORT (Submit Original Form Only) | CHANGE WELL NAME | | | 긤 | WATER SHUT-OFF | | |
| Date of work completion: | CHANGE WELL STATUS | | ON (START/RESUME) | | | | |
| | COMMINGLE PRODUCING FORMATIONS | | ION OF WELL SITE | ₩_ | OTHER: FINAL DRILLING OPERATIONS | | |
| | CONVERT WELL TYPE | | TE - DIFFERENT FORMATION | | | | |
| FINISHED DRILLING FRO SX PREM LITE II @11.8 NDBOPE CUT OFF CSG | COMPLETED OPERATIONS. Clearly show all p COM 2550' TO 9400' ON 11/24/200 PPG 2.52 YIELD. TAILED CMT V S. JET AND CLEAN PITS. G 83 ON 11/26/2006 AT 0400 HRS | 06. RAN 4 1 V/14,75 SX 5 | /2" 11.6# I-80 PRO[| DUCTI | ON CSG. LEAD CMT W/535 1 YIELD. SET CSG SLIPS | | |
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| SHEILA L | UPCHEGO | | _ SENIOR LAND | ADMIN | I SPECIALIST | | |

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RECEIVED DEC 0 6 2006

DATE 11/27/2006

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES

| ASE DESIGNATION AND SERIAL NUMBER: | |
|------------------------------------|--|
| UO-015630-ST | |
| | |

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| | STATE: |
| CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO | UTAH |
| | ORT, OR OTHER DATA |
| TYPE OF SUBMISSION NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: CASING REPAIR CHANGE TO PREVIOUS PLANS TYPE OF ACTION DEEPEN FRACTURE TREAT NEW CONSTRUCTION OPERATOR CHANGE PLUG AND ABANDON | REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL TEMPORARILY ABANDON TUBING REPAIR VENT OR FLARE |
| SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: CHANGE WELL NAME CHANGE WELL STATUS PRODUCTION (START/RESUME) COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION | WATER DISPOSAL WATER SHUT-OFF OTHER: PRODUCTION |
| DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, voluntly the SUBJECT WELL LOCATION WAS PLACED ON PRODUCTION ON 12/24/2006 AT SUBJECT WELL LOCATION WAS PLACED ON PRODUCTION ON 12/24/2006 AT SUBJECT WELL HISTORY. | |
| SHEILA UPCHEGO TITLE SENIOR LAND | ADMIN SPECIALIST |
| NAME (PLEASE PRINT) | |
| DATE 1/4/2007 | |

RECEIVED JAN 1 1 2007



Anadarko Petroleum Corporation 1368 S. 1200 East Vernal, UT 84078

CHRONOLOGICAL WELL HISTORY

NBU 921-33J NWSE, SEC. 33 T9S, R21E UINTAH COUNTY, UT

| | Activity Status | |
|----------|---|--------|
| 09/06/06 | Building Location, 5% Complete Caza 83 | |
| 09/07/06 | Building Location, 15% Complete Caza 83 | |
| 09/08/06 | Building Location, 30% Complete Caza 83 | |
| 09/11/06 | Building Location, 40% Complete Caza 83 | |
| 09/12/06 | Building Location, 40% Complete Caza 83 | |
| 09/13/06 | Building Location, 40% Complete Caza 83 DRLG | |
| 09/18/06 | Building Location, 40% Complete Caza 83 DRLG | |
| 09/19/06 | Building Location, 70% Complete Caza 83 | |
| 09/20/06 | Building Location, 80% Complete Caza 83 | |
| 09/21/06 | Building Location, 90% Complete Caza 83 | |
| 09/22/06 | Location complete, 100 P/L IN Caza 83 | |
| 10/11/06 | TD: 2040' Csg. 9 5/8" @ 2549' MW: 8.3 SD: 10/XX/06 Move to NBU 921-33J. Set in rig. Send "A" legs to Casper for repair. | DSS: 0 |
| 10/12/06 | TD: 2040' Csg. 9 5/8" @ 2549' MW: 8.3 SD: 10/XX/06 Rig on repair. Send "A" legs to Casper for repair. | DSS: 0 |
| 10/13/06 | TD: 2040' Csg. 9 5/8" @ 2549' MW: 8.3 SD: 10/XX/06 Rig on repair. Send "A" legs to Casper for repair. | DSS: 0 |
| 10/16/06 | TD: 2040' Csg. 9 5/8" @ 2549' MW: 8.3 SD: 10/XX/06 Rig on repair. Repairing "A" legs. | DSS: 0 |
| 10/17/06 | TD: 2040' Csg. 9 5/8" @ 2549' MW: 8.3 SD: 10/XX/06 Rig on repair. Repairing "A" legs. Will rig up on 10/18/06. | DSS: 0 |
| 10/18/06 | TD: 2040' Csg. 9 5/8" @ 2549' MW: 8.3 SD: 10/XX/06 Rig on repair. Repairing "A" legs. Will rig up on 10/18/06. | DSS: 0 |
| 10/19/06 | TD: 2040' Csg. 9 5/8" @ 2549' MW: 8.3 SD: 10/XX/06 MOBE "A" legs to rig. Inspect same. Will rig up this am. | DSS: 0 |

| 10/20/06 | TD: 2550' Csg. 9 5/8" @ 2549' MW: 8.3 SD: 10/XX/06 DSS: 0 Rig up derrick and set on floor. Re-cut braces on A-legs at bottom of bridal line sheave. RURT @ report time. |
|----------|--|
| 10/23/06 | TD: 4449' Csg. 9 5/8" @ 2549' MW: 9.2 SD: 10/21/06 DSS: 2 Finish RURT. NU and test BOPE. PU BHA and DP. Drill FE. Drill from 2550'-3862'. TOOH and change out rotating head bowl. TIH and drill to 4449'. DA @ report time. |
| 10/24/06 | TD: 5850' Csg. 9 5/8" @ 2549' MW: 10.0 SD: 10/21/06 DSS: 3 Drill from 4449'-5850'. DA @ report time. Top of Wasatch @ 4818'. |
| 10/25/06 | TD: 5850' Csg. 9 5/8" @ 2549' MW: 10.7 SD: 10/21/06 DSS: 4 Drill from 5850'-6753'. DA @ report time. |
| 10/26/06 | TD: 7188' Csg. 9 5/8" @ 2549' MW: 10.7 SD: 10/21/06 DSS: 5 Drill from 6753'-7188'. DA @ report time. |
| 10/27/06 | TD: 7500' Csg. 9 5/8" @ 2549' MW: 10.9 SD: 10/21/06 DSS: 6 Drill from 7188'-7254'. TFNB. Drill to 7500'. DA @ report time. |
| 10/30/06 | TD: 9438' Csg. 9 5/8" @ 2549' MW: 12.0 SD: 10/21/06 DSS: 9 Drill from 7500'-9438'. TFNB @ report time. |
| 10/31/06 | TD: 9700' Csg. 9 5/8" @ 2549' MW: 12.0 SD: 10/21/06 DSS: 10 TFNB. W&R f/ 4160'-4316'. FIH and drill f/ 9438'-9700'(TD). At 9460' hit water flow gaining ±600 bbls while drilling to TD. MW cut f/ 12.0 to 10.7 so pulled 5 stands to get above water flow. Regained circ then hole packed off at 9250'. Working stuck pipe @ report time. |
| 11/01/06 | TD: 9700' Csg. 9 5/8" @ 2549' MW: 12.4 SD: 10/21/06 DSS: 11 Worked stuck pipe. RU wireline and run free pt. Backed off at 4875' and could not circulate. PUH to 4220' and establish circ with 12.4 mud and gravel in returns. TOOH @ report time. |
| 11/02/06 | TD: 9700' Csg. 9 5/8" @ 2549' MW: 12.4 SD: 10/21/06 DSS: 12 TOOH and PU new BHA, jars, and bit. TIH and W&R f/ 4253'-4773'. Bit torqued up so TOOH. Bit and DC balled up. Clean up same and TIH @ report time. |
| 11/03/06 | TD: 9700' Csg. 9 5/8" @ 2549' MW: 12.4 SD: 10/21/06 DSS: 13 TIH to 4674' and W&R to top of fish @ 4881'. CCH and work pipe. TOOH and PU fishing tools. TIH and attempt to screw in to fish w/o kelly w/o success. PU kelly, slowly rotating, and circ and screwed into fish. Could not circulate or jar up. Jarred fish down 30'. Lay down swivel and wait on freepoint truck @ report time. |
| 11/06/06 | TD: 9700' Csg. 9 5/8" @ 2549' MW: 12.4 SD: 10/21/06 DSS: 16 Wait on wireline. Run FP and backoff @ 7026'. No circ but could rotate. Pulled 4' and stopped. Ran second FP and backoff @ 5784'. Worked pipe out of hole. PU BHA and bit and TIH. W&R f/ 4860'-5305'. TFNB. W&R f/ 5305'-5784'. CCH. TOOH for fishing tools @ report time. |
| 11/07/06 | TD: 9700' Csg. 9 5/8" @ 2549' MW: 12.4 SD: 10/21/06 DSS: 16 PU fishing tools and TIH to top of fish @ 5784'. Push fish down hole to 5822' and screw into fish. Jar up on fish 22'. Jars stopped operating. PU spud bar and run inside drill pipe to 6044'. Tagged up above pack off. POOH and run core barrel to clean out inside of DP @ report time. |
| 11/08/06 | TD: 9700' Csg. 9 5/8" @ 2549' MW: 12.4 SD: 10/21/06 DSS: 16 POOH with core barrel. Run freepoint and back off @ 6031'. TOOH with fish. Make up bit and TIH to 5711'. Wash and ream from 5711'-5820' @ report time. |

TIH to 5711'. Wash and ream from 5711'-5820' @ report time.

- 11/09/06 TD: 9700' Csg. 9 5/8" @ 2549' MW: 12.6 SD: 10/21/06 DSS: 19 Wash and ream from 5820'-TOF @ 6031'. TOOH and PU fishing tools. TIH and CBU. Screw into fish and try to establish circulation without success. Jar on fish @ report time.
- 11/10/06 TD: 9700' Csg. 9 5/8" @ 2549' MW: 12.6 SD: 10/21/06 DSS: 20

 Jar on fish. RU and run free point @ 6094. Back off and POOH with fish. Recovered 2 jts DP.

 TIH with bit and clean out to TOF @ report time. (Will sidetrack this well).
- TD: 5640' Csg. 9 5/8" @ 2549' MW: 12.2 SD: 10/21/06 DSS: 23 TOOH and lay down fishing tools. TIH with DP and set cement plug on top of fish @ 6094'. TOOH 15 stds and PU Kelly. Pressured up to 2000 psi. FOOH and lay down 27 jts of plugged DP. TIH and inspect drill collars. Wash and ream from 4627'-4710'. CIH to top of cement @ 5326'. Wash down and clean out to good cement at 5640'. Lost 400 bbls mud. Build volume to 12.2 ppg. POOH. TIH and pump second cement plug @ 5640'. Pull 10 stds and circulate btms up. POOH and PU tri cone bit. TIH to shoe and WOC.
- 11/14/06 TD: 5390' Csg. 9 5/8" @ 2549' MW: 12.1 SD: 10/21/06 DSS: 24 TIH and tag cement @ 4768'. Wash and ream to 5330'. Had good cement @ 5330'. CBU and TOOH for directional tools. TIH and time drill off cement plug @ report time.
- 11/15/06 TD: 5485' Csg. 9 5/8" @ 2549' MW: 11.6 SD: 10/21/06 DSS: 25 Time drill off cement plug from 5390'-5474'. TFNB and MM. Drill to 5485'. DA @ report time.
- 11/16/06 TD: 5702' Csg. 9 5/8" @ 2549' MW: 11.9 SD: 10/21/06 DSS: 26 Drill and build angle f/ 5485'-5702'. At 5630' 6.4° at azimuth of 206. DA @ report time.
- 11/17/06 TD: 5970' Csg. 9 5/8" @ 2549' MW: 11.8 SD: 10/21/06 DSS: 27 Drill and build angle f/ 5702'-5970'. At 5876' 9.9° at azimuth of 209. DA @ report time.
- 11/20/06 TD: 7636' Csg. 9 5/8" @ 2549' MW: 11.7 SD: 10/21/06 DSS: 30 Drill f/ 5970'-6002'. TFNB. PU HWDP and LD collars. TIH and drill to 7636'. Survey at 7532' 3.8° at azimuth of 215. DA @ report time.
- 11/21/06 TD: 8282' Csg. 9 5/8" @ 2549' MW: 12.1 SD: 10/21/06 DSS: 31 Drill f/ 7636'-8282'. Survey at 8180' 1.6° at azimuth of 194. DA @ report time.
- 11/22/06 TD: 8563' Csg. 9 5/8" @ 2549' MW: 12.1 SD: 10/21/06 DSS: 32 Drill f/ 8282'-8563'. TFNB. LD dir tools and drill collars out of derrick. TIH @ report time.
- 11/27/06 TD: 9400' Csg. 9 5/8" @ 2549' MW: 12.5 SD: 10/21/06 DSS: 36 Run Triple Combo. TIH with drill string and CCH for casing. Lay down drill string. Run and cement 4 ½" Production Casing. Set slips and release rig @ 0400 hrs 11/26/06. RDRT and prepare to move to Federal 920-25H this am.

12/12/06 PU TUBING

Days On Completion: 1

Remarks:MIRU RIG. HSM. ND WH, NU BOP. PU 3-7/8" BIT, SUB. PREP, TALLY & PU TBG FR FLOAT. RIH W/BIT & TBG TO 7500'. POOH, STAND BACK TBG, LD BIT & SUB. RD FLR, ND BOP, NU FRAC VLV STND. MIRU B&C QUICK TEST. PRES TEST CSG & VLVS TO 7500 PSI. RDMO B&C. DRAIN DN LINES & PMP. RU HEATER TO WH. MIRU H.O. EXPRESS TO HEAT FRAC TNKS. PREP TO FRAC IN MORNING. SWI, SDFN.

12/13/06 FRAC

Days On Completion: 2

Remarks: MIRU BJ & CWLS. HSM.

ALL STAGES WILL BE FRAC'D WTHE FOLLOWING: 20/40 MESH SND; DVE-OO5 SCALE INHIBITOR (3 GPT IN PAD THRU' MID RAMP & 10 GPT IN FLUSH); 3-3/8" EXP PERF GUNS (23 GM CHG, 40" PENE, 0.36" HOLE DIA, HMX PWDR, 4 SPF, 90 DEG PHASING); GELLED LIGHTNING FLUID; CBPs ARE BAKER 8K 4.5". RESIN COATED SAND WILL BE PUMPED LAST 5,000 LBS SAND OF EA STG.

STAGE 1: PU PERF GUN. RIH, PERF: 9156-60 & 9141-45', TOT OF 32 HOLES. POOH, LD WLTLS. MU BJ. PRES TEST SURF LINES TO 8500 PSI. OW: 0 PSI, BRK: 3891 PSI, ISIP: 3000 PSI, FG: 0.76. FRAC STG W/LIT 22# GEL. TOT SND: 233,825 LSB, TOT FL: 2009 BBL. ISIP: 4000 PSI, FG: 0.87. MP: 6542 PSI, MR: 41.7 BPM, AP: 6096 PSI, AR: 41.5 PSI.

STAGE 2: PU CBP & PERF GUN. RIH, SET CBP @ 8642'. PU, PERF: 8608-12, 8539-43 & 8404-06'. TOT OF 40 HOLES. POOH, LD WL TLS. MU BJ. OW: 1030 PSI, BRK: 3114 PSI, ISIP: 2900 PSI, FG: 0.77. FRAC STG W/LIT 20# GEL. TOT SND: 130,659 LBS, TOT FL: 1050 BBL. ISIP: 3800 PSI, FG: 0.88. MP: 5842 PSI, MR: 42 BPM, AP: 5585 PSI, AR: 41.8 BPM.

STAGE 3: PU CBP & PERF GUN, RIH, SET CBP @ 8330'. PU, PERF: 8295-8300', TOT OF 20 HOLES. POOH, LD WL TLS. MU BJ. OW: 300 PSI, BRK: 7120 PSI, ISIP: 3300 PSI, FG: 0.83. FRAC STG W/LIT 20# GEL. TOT SND: 39,350 LBS, TOT FL: 437 BBL. ISIP: 3475 PSI, FG: 0.85. MP: 4163 PSI, MR: 19.8 BPM, AP: 3789 PSI, AR: 19.7 BPM.

STAGE 4: PU CBP & PERF GUN, RIH, SET CBP @ 8085'. PU, PERF: 8052-55, 8028-32' & 7966-69'. TOT OF 40 HOLES. POOH, LD WL TLS. MU BJ. ATTEMPT TO BRK, PMP DN. MAKE REPAIRS, ATTEMPT TO BRK. COULDN'T GET CROSSLINK PMP TO WORK. SHUT DN, ATTEMPT TO MAKE REPAIRS 2 1/2 HRS. SUT DN FOR NITE TO

12/14/06 FRAC

Days On Completion: 3

Remarks:HSM. ALL STAGES WILL BE FRAC'D WTHE FOLLOWING: 20/40 MESH SND; DVE-OO5 SCALE INHIBITOR (3 GPT IN PAD THRU' MID RAMP & 10 GPT IN FLUSH); 3-3/8" EXP PERF GUNS (23 GM CHG, 40" PENE, 0.36" HOLE DIA, HMX PWDR, 4 SPF, 90 DEG PHASING); GELLED LIGHTNING FLUID; CBPs ARE BAKER 8K 4.5".

STAGE 4: OW: 2050 PSI, BRK: 7120 PSI, ISIP: 2450 PSI, FG: 0.74. ER:46.4 BPM @ 4600 PSI. POC: 100%. FRAC STG W/LIT 20# GEL. TOT SND: 333,450 LBS, TOT FL: 3122 BBL. ISIP: 2900, FG: 0.79. MP: 4958 PSI, MR:45.5 BPM, AP: 3522 PSI, AR: 45.2 BPM. MU CWLS.

STAGE 5: PU CBP & PERF GUN. RIH, SET CBP @ 7735'. PU, PERF: 7692-97'. TOT OF 20 HOLES. POOH, LD WL TLS. MU BJ. OW: 215 PSI, BRK: 3047 PSI, ISIP: 2050 PSI, FG: 0.70. ER: 20.6 BPM @ 3400 PSI, POC: 55%. FRAC STG W/LIT 18# GEL. TOT SND: 39,740 LBS, TOT FL: 403 BBL. ISIP: 2800 PSI, FG: 0.80. MP: 3419 PSI, MR: 20.7 BPM, AP: 2879 PSI, AR: 20.6 BPM. MU CWLS.

STAGE 6: PU CBP & PERF GUN. RIH, SET CP @ 7100'. PU, PERF: 7066-70', 6722-26' & 6650-52'. TOT OF 40 HOLES. POOH, LD WL TLS. MU BJ.OW: 185 PSI, BRK: 2246 PSI, ISIP: 2050 PSI, FG: 0.73. ER: 45.6 BPM @ 4400 PSI. POC: 63%. FRAC STG W/LIT 18# GEL. TOT SND: 99,506 LBS, TOT FL: 820 BBL. MP: 4549 PSI, MR: 46.2 BPM, AP: 4208 PSI, AR: 45.8 BPM.

STAGE 7: PU CBP & PERF GUN. RIH, SET CBP @ 6321'. PU, PERF: 6286-91' & 6234-37'. TOT OF 32 HOLES. POOH, LD WL TLS. MU BJ. OW: 240 PSI, BRK: 1846 PSI, ISIP: 1700 PSI, FG: 0.70. ER: 35.6 BPM @ 3700 PSI. POC: 53%. FRAC STG W/LIT 18# GEL. TOT SND: 88,543 LBS, TOT FL: 575 BBL. ISIP: 2900 PSI, FG: 0.90. MP: 2945 PSI, MR: 35.7 BPM, AP: 2875 PSI, AR: 35.6 BPM. MU CWLS. PU KILL PLUG. RIH, SET PLUG @ 6130'. POOH, LD & RDMO CWLS & BJ SERV. RD FLR, ND FRAC VLVS, NU BOP. DRAIN DN LINES, PREP TO D/O ON MORNING.

12/15/06 DO PLUGS

Days On Completion: 4

Remarks: HSM. OW: 0 PSI. PU 3-7/8" BIT & FE POBS. RIH W/BIT, SUB & TBG. TAG FILL ON KILL PLUG @ 6115'. X-OVER EQUIP TO PWR SWVL, RU PMP TO SWVL. DRILL OUT PLUGS AS FOLLOWS:

| LUCU MOI OL | LO110. | | | |
|-------------|-----------|----------|---------|----------|
| CBP# | FILL DPTH | CBP DPTH | TIME | PSI INCR |
| 1 | 6115' | 6130' | 11 MINS | 20 PSI |
| 2 | 6290' | 6321' | 10 | 250 |
| 3 | 7055' | 7100' | 19 | 100 |
| 4 | 7695' | 7735' | 24 | 300 |
| 5 | 8055' | 8085' | 20 | 400 |
| 6 | 8300' | 8330' | 20 | 400 |
| 7 | 8610' | 8642' | 25 | 0 |

CONT TO C/O TO PBTD. CIRC HOLE CLN. RD PMP, X-OVER EQUP TO TBG. POOH, LD TBG ON FLT W/TOT OF 42 JTS ON FLT. PU HNGR, LND TBG. ND BOP, NU WH, DROP BALL. RU FL TO PIT & PMP TO TO TBG. PMP OFF SUB & BIT. TOT OF 301 JTS TBG ON LOC, LANDED TBG W/259 JTS IN HOLE, 42 JTS ON FLOAT. EOT @ 8212.19' (TBG ONLY: 8192.6'). OPEN WELL TO PIT. TURN WELL OVER TO FBC (KEN D.)

- 12/16/06 FLOW BACK REPORT: CP: 1450#, TP: 1100#, 70 BWPH, 20/64 CHK, TTL BBLS FLWD: 955, TODAYS LTR: 5461 BBLS, TTL LOAD REC'D 2955 BBLS
- **12/17/06 FLOW BACK REPORT**: CP: 2250#, TP: 1100#, 60 BWPH, 20/64 CHK, TTL BBLS FLWD: 1490, TODAYS LTR: 3971 BBLS, TTL LOAD REC'D 4445 BBLS.
- 12/18/06 FLOW BACK REPORT: CP: 3150#, TP: 1100#, 50 BWPH, 20/64 CHK, TTL BBLS FLWD: 1250, TODAYS LTR: 2721 BBLS, TTL LOAD REC'D 5695 BBLS.
- 12/19/06 FLOW BACK REPORT: CP: 2950#, TP: 1200#, 40 BWPH, 20/64 CHK, TTL BBLS FLWD: 1085, TODAYS LTR: 1636 BBLS, TTL LOAD REC'D 6780 BBLS
- **12/20/06 FLOW BACK REPORT**: CP: 2750#, TP: 1200#, 35 BWPH, 20/64 CHK, TTL BBLS FLWD: 915, TODAYS LTR: 721 BBLS, TTL REC'D: 7695
- **12/21/06 FLOW BACK REPORT**: CP: 2600#, TP: 1150#, 30 BWPH, 20/64 CHK, TTL BBLS FLWD: 760, TODAYS LTR: -39 BBLS, TTL REC'D: 8455
- **12/22/06 FLOW BACK REPORT**: CP: 2600#, TP: 850#, 30 BWPH, 20/64 CHK, TTL BBLS FLWD: 690, TODAYS LTR:-729 BBLS, TTL LOAD REC'D: 9145 BBLS.
- **12/23/06 FLOW BACK REPORT**: CP: 2700#, TP: 900#, 30 BWPH, 20/64 CHK, TTL BBLS FLWD: 720, TODAYS LTR: -1449 BBLS, TTL LOAD REC'D: 9865 BBLS.
- 12/24/06 WELL WENT ON SALES: @ 9:34 A.M., TBG 588/2768, CSG 2790, 22/64 CK, 40 BBLS/HR WTR, MCF 500 FLOW BACK REPORT: CP: 2700#, TP: 1025#, 30 BWPH, 20/64 CHK, TTL BBLS FLWD: 720, TODAYS LTR: -2169 BBLS, TTL LOAD REC'D: 10585 BBLS. ON SALES: 533 MCF, 0 BC, 45 BW, TP: 1008#, CP: 2526#, 22/64 CHK, 18 HRS, LP: 215#.
- 12/25/06 ON SALES: 840 MCF, 0 BC, 50 BW, TP: 791#, CP: 2173#, 22/64 CHK, 24 HRS, LP: 177#.
- 12/26/06 ON SALES: 786 MCF, 0 BC, 205 BW, TP: 676#, CP: 2009#, 22/64 CHK, 24 HRS, LP: 171#.
- 12/27/06 ON SALES: 712 MCF, 0 BC, 800 BW, TP: 598#, CP: 2084#, 22/64 CHK, 24 HRS, LP: 152#.

| 12/28/06 | ON SALES: 655 MCF, 0 BC, 800 BW, TP: 557#, CP: 1960#, 22/64 CHK, 24 HRS, LP: 145#. |
|----------|---|
| 12/29/06 | ON SALES: 655 MCF, 0 BC, 800 BW, TP: 557#, CP: 1960#, 22/64 CHK, 24 HRS, LP: 145#. |
| 12/30/06 | ON SALES: 655 MCF, 0 BC, 800 BW, TP: 557#, CP: 1960#, 22/64 CHK, 24 HRS, LP: 145#. |
| 12/31/06 | ON SALES: 665 MCF, 0 BC, 750 BW, TP: 485#, CP: 1623#, 22/64 CHK, 24 HRS, LP: 135#. |
| 12/25/06 | ON SALES: 840 MCF, 0 BC, 50 BW, TP: 791#, CP: 2173#, 22/64 CHK, 24 HRS, LP: 177#. |

AMENDED REPORT FORM 8 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES (highlight changes) 5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND MINING STUO-015630-ST 6. IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG 7. UNIT or CA AGREEMENT NAME 1a. TYPE OF WELL: GAS 7 OTHER UNIT #891008900A 8. WELL NAME and NUMBER: b. TYPE OF WORK: NBU 921-33J DIFF. RESVR. DEEP-HORIZ. RETRY OTHER 9. API NUMBER: 2. NAME OF OPERATOR 4304736394 KERR McGEE OIL & GAS ONSHORE LP 10 FIELD AND POOL, OR WILDCAT PHONE NUMBER: 3. ADDRESS OF OPERATOR: **NATURAL BUTTES** STATE UT ZIP 84078 (435) 781-7024 CITY VERNAL 1368 S 1200 E 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: 4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 2113'FSL, 1951'FEL NWSE 33 9S 21E AT TOP PRODUCING INTERVAL REPORTED BELOW: 13. STATE 12. COUNTY UTAH UINTAH AT TOTAL DEPTH: 17. ELEVATIONS (DF, RKB, RT, GL): 16. DATE COMPLETED: 14. DATE SPUDDED: 15. DATE T.D. REACHED: READY TO PRODUCE 🗸 ABANDONED 5023'GL 12/24/2006 11/24/2006 9/23/2006 21. DEPTH BRIDGE MD 19. PLUG BACK T.D.: MD 9,928 20. IF MULTIPLE COMPLETIONS, HOW MANY? * 18. TOTAL DEPTH: MD TVD 22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) ио 🗸 YES (Submit analysis) WAS WELL CORED? CBL-CCL-GR ио 🔽 YES (Submit report) WAS DST RUN? ио 🔽 YES [(Submit copy) DIRECTIONAL SURVEY? 24. CASING AND LINER RECORD (Report all strings set in well) SLURRY STAGE CEMENTER CEMENT TYPE & CEMENT TOP ** AMOUNT PULLED BOTTOM (MD) WEIGHT (#/ft.) TOP (MD) SIZE/GRADE VOLUME (BBL) HOLE SIZE 14" STL 36.7# 40 20" 2,550 680 32.3# 12 1/4" 9 5/8 H-40 2010 9,400 7 7/8' 4 1/2 1-80 11.6# 25. TUBING RECORD DEPTH SET (MD) PACKER SET (MD) SIZE DEPTH SET (MD) PACKER SET (MD) DEPTH SET (MD) PACKER SET (MD) SIZE 2 3/8" 8.212 27. PERFORATION RECORD 26. PRODUCING INTERVALS SIZE NO. HOLES PERFORATION STATUS INTERVAL (Top/Bot - MD) BOTTOM (TVD) TOP (TVD) TOP (MD) BOTTOM (MD) FORMATION NAME Open 🗸 Squeezed 72 0.36 6.234 7,070 6,234 7,070 (A) WASATCH Squeezed 0.36 152 Open 7.692 9,160 (B) MESAVERDE 7.692 9.160 Squeezed Open (C) (D) 28. ACID. FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. AMOUNT AND TYPE OF MATERIAL DEPTH INTERVAL PMP 1395 BBLS LIGHTNING 18 & 188,049# 20/40 SD 6234'-7070' GAS & MINING PMP 7021 BBLS LIGHTNING 18, 20, 22 & 777,074# 20/40 SD 7692'-9160' 30. WELL STATUS: 29. ENCLOSED ATTACHMENTS: DST REPORT DIRECTIONAL SURVEY GEOLOGIC REPORT **PROD** ELECTRICAL/MECHANICAL LOGS OTHER: CORE ANALYSIS SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION

(CONTINUED ON BACK)

| 31. INITIAL PRO | DOUCTION | | | | IN | TERVAL A (As show | vn in item #26) | | | | |
|------------------------------------|------------------------------------|------------------------------------|---|-----------|--------------------------------------|---------------------------------|------------------------------|-----------------|---------------------|---------------------------|--------------------------|
| DATE FIRST PRODUCED: 12/24/2006 | | TEST DAT | | | HOURS TESTE | ED: 24 | TEST PRODUCTION RATES: → | OIL – BBL: | GAS - MCF: 1,071 | WATER - BBL 750 | PROD. METHOD: FLOWING |
| CHOKE SIZE: 22/64 | TBG, PRESS. | CSG. PRE 1,45 | | VITY | BTU - GAS | BTU – GAS GAS/OIL RATIO 2: R | | OIL BBL: | GAS - MCF: 1,071 | WATER – BBI 750 | .: INTERVAL STATUS: PROD |
| | ! | | | | IN | TERVAL B (As show | vn in item #26) | | | | |
| DATE FIRST PR 12/24/200 | | TEST DA | | | 1100.10 120.20. | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS - MCF: 1,071 | WATER - 881 750 | PROD. METHOD: FLOWING |
| CHOKE SIZE: 22/64 | TBG. PRESS. 578 | CSG. PRI 1,4 | | VITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: 0 | GAS - MCF: 1,071 | WATER - BBI 750 | .: INTERVAL STATUS: PROD |
| | .t | | | | IN | ITERVAL C (As show | vn in item #26) | | | | |
| DATE FIRST PR | ODUCED: | TEST DA | TE: | | HOURS TESTE | ED: | TEST PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER - BBI | .: PROD. METHOD: |
| CHOKE SIZE: | TBG. PRESS. | CSG. PRI | ESS. API GRA | AVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS - MCF: | WATER - BBI | : INTERVAL STATUS: |
| | | | | | IN | ITERVAL D (As show | wn in item #26) | | | | - |
| DATE FIRST PR | ODUCED: | TEST DA | TE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS - MCF: | WATER - BB | .: PROD. METHOD: |
| CHOKE SIZE: | TBG. PRESS. | . CSG. PRI | ESS. API GRA | AVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS MCF: | WATER - BB | .: INTERVAL STATUS: |
| 32. DISPOSITIO | ON OF GAS (So | ld, Used for F | uel, Vented, Etc. | .) | . <u>.</u> | • | | - | | | |
| 33. SUMMARY | OF POROUS Z | ONES (Includ | e Aquifers): | | " | | 3 | 4. FORMATION | (Log) MARKERS: | | |
| Show all importatested, cushion of | ant zones of portused, time tool o | osity and conte open, flowing a | ents thereof: Core nd shut-in pressu | d interva | als and all drill-ste recoveries. | em tests, including de | epth interval | | | | |
| Formati | on | Top (MD) | Bottom (MD) | | Descriptions, Contents, etc. Name | | | | | | Top (Measured Depth) |
| WASATCI MESAVEI | | 4,814 7,565 | 7,565 | | | | | | | | |
| 35 ADDITIONA | L REMARKS | Include pluga | ing procedure) | | | | | | | | |

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) SHEJLA UPCHEGO
SIGNATURE

TITLE SENIOR LAND ADMIN SPECIALIST

DATE 1/18/2007

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- * ITEM 20: Show the number of completions if production is measured separately from two or more formations.
- ** ITEM 24: Cement Top Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940



Kerr-McGee Oil & Gas Onshore LP 1099 18 STREET, SUITE 1200 DENVER, CO 80202

March 26, 2008

Division of Oil, Gas and Mining ATTN: Gil Hunt P.O. Box 145801 Salt Lake City, Utah 84114-5801

43-047-36394

RE: Water Disposal Well proposal NBU 921-33J SWD 2113' FSL, 1951' FEL (NW/4SE/4) Sec 33-9S-21E

Uintah County, Utah Natural Buttes Unit

Dear Mr. Hunt,

Kerr-McGee Oil & Gas Onshore LP proposes to convert the NBU 921-33J into a saltwater disposal well down to 1664'-1969' in the Bird's Nest of the Green River formation. The well is owned by Kerr-McGee 100%. We must notify all owners within one-quarter mile of the well site prior to filing the UIC. Please feel free to contact me at (720) 929 6698 should you have any questions. Thank you for your assistance.

Sincerely,

James C. Colligan III

Landman

Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

STATE OF UTAH

| | DEPARTMENT OF NATURAL RESOU | RCES | |
|---|---|----------------------------|---|
| l | 5. LEASE DESIGNATION AND SERIAL NUMBER: STUO-015630-ST | | |
| SUNDRY | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | |
| | ew wells, significantly deepen existing wells below cur sterals. Use APPLICATION FOR PERMIT TO DRILL f | | 7. UNIT or CA AGREEMENT NAME: UNIT #891008900A |
| 1. TYPE OF WELL OIL WELL | 8. WELL NAME and NUMBER: NBU 921-33J | | |
| 2. NAME OF OPERATOR: | 9. API NUMBER: | | |
| KERR McGEE OIL & GAS | ONSHORE LP | | 4304736394 |
| 3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST | , VERNAL STATE UT ZIP | PHONE NUMBER: (435) 781-70 | 10. FIELD AND POOL, OR WILDCAT: 24 NATURAL BUTTES |
| 4. LOCATION OF WELL | | | |
| FOOTAGES AT SURFACE: 2113'F | COUNTY: UINTAH | | |
| QTR/QTR, SECTION, TOWNSHIP, RAN | ge, meridian: NWSE 33 9S 2 | 21E | STATE: UTAH |
| 11. CHECK APPE | ROPRIATE BOXES TO INDICAT | TE NATURE OF NOTICE, I | REPORT, OR OTHER DATA |
| TYPE OF SUBMISSION | | TYPE OF ACTION | |
| NOTICE OF INTENT | ACIDIZE | DEEPEN | REPERFORATE CURRENT FORMATION |
| (Submit in Duplicate) | ALTER CASING | FRACTURE TREAT | SIDETRACK TO REPAIR WELL |
| Approximate date work will start: | CASING REPAIR | NEW CONSTRUCTION | TEMPORARILY ABANDON |
| | CHANGE TO PREVIOUS PLANS | OPERATOR CHANGE | TUBING REPAIR |
| | CHANGE TUBING | PLUG AND ABANDON | VENT OR FLARE |
| SUBSEQUENT REPORT | CHANGE WELL NAME | PLUG BACK | WATER DISPOSAL |
| (Submit Original Form Only) | CHANGE WELL STATUS | PRODUCTION (START/RESUME) | WATER SHUT-OFF |
| Date of work completion: | COMMINGLE PRODUCING FORMATIONS | RECLAMATION OF WELL SITE | OTHER: |
| | CONVERT WELL TYPE | RECOMPLETE - DIFFERENT FOR | MATION |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE OPERATOR HAS PERFORMED A RECOMPLETION ON THE SUBEJCT WELL LOCATION. THE OPERATOR HAS RECOMPLETED THE WASATCH FORMATION, THE OPERATOR HAS COMMINGLED THE NEWLY WASATCH FORMATION ALONG WITH THE EXISTING WASATCH AND MESAVERDE FORMATION. THE OPERATOR HAS TRIED PLACING THE SUBJECT WELL LOCATION BACK TO PRODUCTION, APPARENTLY THE WELL WILL NOT START-UP. THE OPERATOR HAS TRIED SEVERAL TIMES TO GET THE WELL GOING. THE OPERATOR IS IN PROCESS OF EVALUATING THE WELL.

PLEASE REFER TO THE ATTACHED RECOMPLETION CHRONOLOGICAL WELL HISTORY.

| NAME (PLEASE PRINT) SHETCH UPCHEGO | TITLE | REGULATORY ANALYST | _ |
|------------------------------------|-------------|--------------------|---|
| SIGNATURE /// | MANUAL DATE | 1/8/2009 | _ |
| | | P DESCUES | = |

(This space for State use only)

JAN 1 2 2009

| Wins No.: | 92020 | | | | NBI | J 921-3 | 33J | | API No.: | 4304736394 | |
|----------------|-------------------|------------------|--|----------|-------------|---------|--|---|---|--|--|
| EVENT INFORM | MATION: EVEN | T ACTIVITY: RE | COMPLE | TION | | STAR | T DATE: 10/9/2008 | | AFE NO | 2025557 | |
| | | CTIVE: DEVELO | PMENT | | | END | DATE: | | | | |
| | OBJE | CTIVE 2: RE FR | AC | | | DATE | WELL STARTED PROD | .: | | | |
| | REAS | ON: WAS RECO | MPLETE | | _ | Event | End Status: | | | | |
| RIG OPERATIO | NS: Be | gin Mobilization | Rig On | Location | Rig Cl | narges | Rig Operation Start | Finish Drilling | Rig Release | Rig Off Location | |
| LEED 733 / 733 | i | | | | | | | | | | |
| Date | Time Start-End | Duration (hr) | Phase | Code | Subco de | P/U | | Operati | on | | |
| 10/13/2008 | SUPERVISOR: | WILL GLEAVE | | | • | | - | • | | MD: | |
| | 7:00 - 17:00 | 10.00 | COMP | 31 | I | Р | HSM. MIRU FROM NE ON CSG.) RETRIEVE PUMP & LINES. KILL V TOOH W/ 194 JTS 2-3/ | PLUNGER & SPR WELL W/ FLUID. I '8 J-55 TBG. SWI- | ING W/ SLICKLIN ND WH. NU BOP SDFN | E. RU 'S. | |
| | | | | | | | NOTE: PRICE BROS. & REPORTED ZERO H | | ROLLED 10 FRA | C TANKS | |
| 10/14/2008 | SUPERVISOR: | WILL GLEAVE | | | | | | | | MD: | |
| | 7:00 - 12:00 | 5.00 | COMP | 31 | 1 | Р | HSM. KILL WELL W/ 2 3-7/8 MILL & BIT SUB. VALVE. | | | | |
| | 12:00 - 15:00 | 3.00 | COMP | 34 | I | Р | MIRU CASEDHOLE SC 6260'. POOH. PU 4-1/ MIRU B&C QUICK TES TO 6000#. (HELD). RE SDFN. | /2 CBP & RIH. SE ST. PRESSURE T | T CBP @ 6192'. F EST CSG & FRAC | POOH. C VALVES | |
| 10/15/2008 | SUPERVISOR: | WILL GLEAVE | | · | | | | | | MD: | |
| | 7:00 - 15:00 | 8.00 | COMP | 36 | E | Р | HSM. WAIT FOR SCH PRESSURE TEST LINI SHOOT 24 HOLES FR BREAK DOWN PERFS SHOOT 16 HOLES FR 49.9 BBL/MIN @ 3746# TAILED IN W/ 5000# T ISIP 2200. FG .79. NF | ES TO 7000#. PU OM 6174-80' RU (@ 1922#. ISIP 1: OM 6036-40'. PO(#. TREATED STA LC SAND. 2300 B | 3-3/8 PERF GUN N GUNS BELOW 290#. FG .64. PL DH. EST INJ RAT GE 1 W/ 75,224#: | S & RIH. PERFS. J GUNS, E OF SAND, | |
| | | | | | | | 5893'. PU, SHOOT 40 DOWN PERFS @ 3050 BBL/MIN @ 3600#. TF TAILED IN W/ 5000# T | TAGE 2: PU 4-1/2 CBP & 3-3/8 PERF GINS. RIH, SET CBP @ 893'. PU, SHOOT 40 HOLES FROM 5853-63'. POOH. BREAK DWN PERFS @ 3050#. ISIP 825#. FG .57. EST INJ RATE OF 50 BL/MIN @ 3600#. TREATED STAGE 2 W/ 57,826# SAND. AILED IN W/ 5000# TLC SAND. 1808 BBLS TOTAL CLEAN FLUID. IP 2200#. FG .81. NPI 1375#. | | | |
| | | | | | | | NOTE: ALL STAGES S PHASING. 0.36" DIA H BAKER 4-1/2 8K CBP'S DVE-005 SCALE INHIE PRE-PAD & FLUSH. A BIODCIDE, 1/2 GPT. A TAILED IN W. 5000# T | HOLES. 23 GM CH S. ALL STAGES T B, 3 GPT IN PAD & NLL CLEAN FLUID ALL STAGES TRE. | HARGES.ALL CBI REATED W/ NAL 11/2 RAMP. 10 G TREATED W/ NA ATED W/ 30/50 S. | P'S ARE CO PT IN LLCO | |
| | | | | | | | NOTE: SAND TOTALS SAND LEFT OVER. N WRONG FROM SCHL | O EXPLINATION A | | • | |
| | 15:00 - 18:00 | 3.00 | COMP | 31 | 1 | Р | RDMO SCHLUMBERG PU 3-7/8 "HURRICANE KILL PLUG @ 5803" R | E MILL", SLIDING S | | н то | |
| 10/16/2008 | SUPERVISOR: | WILL GLEAVE | ************************************** | ` | | ****** | | | - | MD: | |

10/20/2008 11:09:30AM 20

| Wins No.: | 92020 | | * | NB | U 921-3 | 3 J | API No.: | 4304736394 | |
|------------|--------------|---------------|------|-----|---------|------------|--|--|-----------------|
| | 7:00 - 16:00 | 9.00 | СОМР | 44 | С | P | HSM. BREAK CONV CIR. D.O. 1ST CBP @ 6 TIH, TAG FILL @ 5863'. (30' FILL). C.O. FILL D.O. 2ND CBP. 500# INC. TIH, TAG FILL @ 6180'. (12' FILL). C.O. FILL 6192'. CIRC WELL CLEAN. LD 76 JTS TBG ON TRAILER. LAND TBG. N MIRU DELSCO WIRELINE. CHANGE OUT SI RDMO DELSCO RDMO-SDFWE SICP. 300 TBG PSI. 50 183 JTS IN WELL 76 ON TRAILER 259 JTS ON LOC. EOT @ 5810' | TO CBP @ 589: TO 3RD CBP @ D BOP'S. NU W | 3'. } /H. |
| 10/17/2008 | SUPERVISOR: | DON HULLINGER | ? | · | | | 207 @ 3010 | M | D: |
| | 7:00 - | Jon Modernoe | • | 33 | Α | | 7 AM FLBK REPORT: CP 1500#, TP 50#, 48/6 TRACE SAND, - GAS TTL BBLS RECOVERED: 996 BBLS LEFT TO RECOVER: 3805 | | |
| 10/18/2008 | SUPERVISOR: | DON HULLINGER | ? | Au- | `1, | ··· | ### ################################## | M | <u>D;</u> |
| | 7:00 - | | | 33 | A | | 7 AM FLBK REPORT: CP 1600#, TP 20#, OPE TRACE SAND, - GAS TTL BBLS RECOVERED: 1288 BBLS LEFT TO RECOVER: 3513 | N/64" CK, 13 B\ | VРН, |
| 10/19/2008 | SUPERVISOR: | DON HULLINGER | ? | | | | | <u>M</u> | <u>D:</u> |
| | 7:00 - | | | 33 | Α | | 7 AM FLBK REPORT: CP 1650#, TP 20#, OPE TRACE SAND, - GAS TTL BBLS RECOVERED: 1508 BBLS LEFT TO RECOVER: 3293 | N/64" CK, 9 BW | /PH, |

STATE OF UTAH AMENDED REPORT FORM 8 DEPARTMENT OF NATURAL RESOURCES (highlight changes) 5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND MINING STUO-015630-ST 6. IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG 1a. TYPE OF WELL: 7. UNIT or CA AGREEMENT NAME OIL OTHER UNIT #891008900A Resease - W57 RECOMPLETION b. TYPE OF WORK: WELL NAME and NUMBER: HORIZ. DIFF. RESVR. NEW [RE-ENTRY NBU 921-33J OTHER 9. API NUMBER: 2 NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP 4304736394 10 FIELD AND POOL, OR WILDCAT 3. ADDRESS OF OPERATOR: PHONE NUMBER: STATE UT ZIP 84078 (435) 781-7024 NATURAL BUTTES 1368 S 1200 E CITY VERNAL 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: 4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 2113'FSL, 1951'FEL NWSE 33 98 21E AT TOP PRODUCING INTERVAL REPORTED BELOW: 12. COUNTY AT TOTAL DEPTH: **UTAH** UINTAH 16. DATE COMPLETED: 10/19/08 ABANDONED 15. DATE T.D. REACHED: 17. ELEVATIONS (DF, RKB, RT, GL): 14. DATE SPUDDED: READY TO PRODUCE 🗸 9/23/2006 11/24/2006 12/24/2006 5023'GL 19. PLUG BACK T.D.: MD 9,928 18. TOTAL DEPTH: 20. IF MULTIPLE COMPLETIONS, HOW MANY? 21. DEPTH BRIDGE MD MD 9.400 PLUG SET: TVD TVD 22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) WAS WELL CORED? ио 🔽 YES (Submit analysis) N/A ио 🔽 YES WAS DST RUN? (Submit report) ио 🔽 YES (Submit copy) DIRECTIONAL SURVEY? 24. CASING AND LINER RECORD (Report all strings set in well) STAGE CEMENTER DEPTH CEMENT TYPE & SLURRY WEIGHT (#/ft.) TOP (MD) BOTTOM (MD) CEMENT TOP ** AMOUNT PULLED HOLE SIZE SIZE/GRADE NO. OF SACKS VOLUME (BBL) 14" 20" STL 36.7# 40 28 32.3# 2,550 12 1/4' 9 5/8 680 H-40 7 7/8" 4 1/2 1-80 11.6# 9,400 2010 25. TUBING RECORD DEPTH SET (MD) PACKER SET (MD) SIZE DEPTH SET (MD) PACKER SET (MD) SIZE DEPTH SET (MD) PACKER SET (MD) SIZE 2 3/8' 5,810 27. PERFORATION RECORD 26. PRODUCING INTERVALS FORMATION NAME INTERVAL (Top/Bot - MD) SIZE NO. HOLES PERFORATION STATUS TOP (MD) BOTTOM (MD) TOP (TVD) BOTTOM (TVD) 5,853 (A) WASATCH 6,180 5.853 6,180 0.36 80 Open Squeezed Open Squeezed (B) (C) Open Saueezed Open (D) 28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. AMOUNT AND TYPE OF MATERIAL DEPTH INTERVAL PMP 4108 BBLS SLICK H2O & 133,050# 30/50 SD 5853'-6180'

29. ENCLOSED ATTACHMENTS:

BLECTRICAL/MECHANICAL LOGS

BELECTRICAL/MECHANICAL LOGS

SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION CORE ANALYSIS OTHER:

RECEIVED

JAN 1 2 2009

(5/2000)

(CONTINUED ON BACK)

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

| DATE FIRST PRODUCED: | | TEST DATE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS - MCF: | WATER - BBL: | PROD. METHOD: |
|---------------------------------|-------------|--------------|---------------|---------------|-----------------|------------------------------|--------------|---------------|--------------|------------------|
| CHOKE SIZE: | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS - MCF: | WATER - BBL: | INTERVAL STATUS: |
| | • | | | INT | ERVAL B (As sho | wn in item #26) | | | | |
| DATE FIRST PRODUCED: TEST DATE: | | HOURS TESTER | HOURS TESTED: | | OIL – BBL: | GAS - MCF: | WATER - BBL: | PROD. METHOD: | | |
| CHOKE SIZE: | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU - GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS MCF: | WATER - BBL: | INTERVAL STATUS: |
| | <u> </u> | - | <u> </u> | INT | ERVAL C (As sho | wn in item #26) | | - | | |
| DATE FIRST PR | ODUCED: | TEST DATE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL BBL: | GAS MCF: | WATER BBL: | PROD. METHOD: |
| CHOKE SIZE: | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER - BBL: | INTERVAL STATUS: |
| | • | | | INT | ERVAL D (As sho | wn in item #26) | | | | |
| DATE FIRST PR | ODUCED: | TEST DATE: | | HOURS TESTER | D: | TEST PRODUCTION RATES: → | OIL – BBL: | GAS - MCF: | WATER – BBL: | PROD. METHOD: |
| CHOKE SIZE: | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU - GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS - MCF: | WATER – BBL: | INTERVAL STATUS: |

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

SHUT-IN

33. SUMMARY OF POROUS ZONES (Include Aquifers):

34. FORMATION (Log) MARKERS:

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

| Formation | Top (MD) | Bottom (MD) | Descriptions, Contents, etc. | Name | Top (Measured Depth) |
|----------------------|----------------|----------------|------------------------------|------|-------------------------|
| WASATCH MESAVERDE | 4,943 7,774 | 7,749 9,393 | | | |
| | | | | | |

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) SHETTA UPCHEGO
SIGNATURE

TITLE REGULATORY ANALYST

DATE 1/8/2009

This report must be submitted within 30 days of

• completing or plugging a new well

- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
1595 WYNKOOP STREET
DENVER, CO 80202-1129
http://www.epa.gov/region8
JAN 1 2 2010

Ref: 8P-W-GW

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Grizz Oleen Kerr McGee Onshore Oil and Gas, LP 1368 South 1200 East Vernal, UT 84078 Accepted by the Utah Division of Oil, Gas and Mining

FOR RECORD ONLY

RECEIVED
JAN 2 1 2010

DIV. OF OIL, GAS & MINING

Re: FINAL Permit

EPA UIC Permit UT21190-08170

Well: NBU 921-33J SWD NWSE Sec. 33-T9S-R21E

Uintah County, UT API No.: 43-047-36394

Dear Mr. Oleen:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed NBU 921-33J SWD injection well. A Statement of Basis that discusses the conditions and requirements of this EPA UIC Permit, is also included.

The Public Comment period for this Permit ended on JAN 09 2010. No comments on the Draft Permit were received during the Public Notice period; therefore the Effective Date for this EPA UIC Permit is the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect as of the Effective Date of this Permit.

Please note that under the terms and conditions of this Final Permit you are authorized only to construct the proposed injection well. Prior to commencing injection, you first must fulfill all "Prior to Commencing Injection" requirements of the Final Permit, Part II Section C.1, and obtain written Authorization to Inject from the EPA. It is your responsibility to be familiar with and to comply with all provisions of your Final Permit. The EPA forms referenced in the permit are available at http://www.epa.gov/safewater/uic/reportingforms.html. Guidance documents for Cement Bond Logging, Radioactive Tracer testing, Step Rate testing, Mechanical Integrity demonstration, Procedure in the Event of a Mechanical Integrity Loss, and other UIC guidances, are available at http://www.epa.gov/region8/water/uic/ deep_injection.html. Upon request, hard copies of the EPA forms and guidances can be provided.



This EPA UIC Permit is issued for the operating life of the well unless terminated (Part III, Section B). The EPA may review this Permit at least every five (5) years to determine whether any action is warranted pursuant to 40 CFR § 144.36(a).

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Sarah Bahrman of my staff at (303) 312-6243, or toll-free at (800) 227-8917, ext. 312-6243.

Sincerely,

Stephen S. Tuber
Assistant Regional Administrator

maildoh

Office of Partnerships and Regulatory Assistance

enclosure:

Final UIC Permit

Statement of Basis

cc:

Final Permit Letter:

Uintah & Ouray Business Committee, Ute Indian Tribe

Curtis Cesspooch, Chairman Irene Cuch, Vice-Chairwoman Frances Poowegup, Councilwoman

Ronald Groves, Councilman Phillip Chimburas, Councilman Steven Cesspooch, Councilman

Daniel Picard, Superintendent U.S. Bureau of Indian Affairs Uintah & Ouray Indian Agency

All enclosures:

Larry Love, Director Energy and Minerals Department Ute Indian Tribe

Ferron Secakuku Director, Natural Resources Ute Indian Tribe

Gil Hunt, Associate Director Utah Division of Oil, Gas and Mining

Fluid Minerals Engineering Office U.S. Bureau of Land Management Vernal Office

\$EPA

UNDERGROUND INJECTION CONTROL PROGRAM PERMIT

PREPARED: January 2010

Permit No. UT21190-08170

Class II Salt Water Disposal Well

NBU 921-33J SWD Uintah County, UT

Issued To

Kerr-McGee Oil Gas Onshore, LP

1368 South 1200 East Vernal, UT 84078

| Part I. AUTH | ORIZATION TO CONSTRUCT AND OPERATE |
|---|--|
| PART II. SPEC | CIFIC PERMIT CONDITIONS |
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| | tification Prior to Testing. ss of Mechanical Integrity. |
| 1. Re 2. Inje 3. Inje 4. Inje 5. Inje | WELL OPERATION quirements Prior to Commencing Injection. ection Interval. ection Pressure Limitation ection Volume Limitation. ection Fluid Limitation. sping-Casing Annulus (TCA) |
| RESULTS 1. Mo 2. Mo 3. Re | MONITORING, RECORDKEEPING, AND REPORTING OF nitoring Parameters, Frequency, Records and Reports. nitoring Methods. cords Retention. nual Reports. |
| Section E. 1. Not 2. We 3. App 4. For 5. Plu | PLUGGING AND ABANDONMENT iffication of Well Abandonment, Conversion or Closure. Il Plugging Requirements proved Plugging and Abandonment Plan. ty Five (45) Day Notice of Plugging and Abandonment. gging and Abandonment Report. |
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Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

| Program Code of I | regulations of | ne Safe Drinking Water Act and the U.S. Environmental Protect tions (40 CFR) Parts 2, 124, 14 | ion Agency (EPA) | codified at Title | 40 of the |
|----------------------|----------------|---|------------------|-------------------|-----------|
| | | | ** | | |
| | | Kerr-McGee Oil & Gas | • | ` . | |

is authorized to construct and to operate the following Class II injection well or wells:

NBU 921-33J SWD 2240 ft FSL & 878 ft FEL, NWSE S33, T9S, R21E Uintah County, UT

Vernal, UT 84078

EPA regulates the injection of fluids into injection wells so that injection does not endanger underground sources of drinking water (USDWs). EPA UIC Permit conditions are based on authorities set forth at 40 CFR Parts 144 and 146, and address potential impacts to USDWs.

Under 40 CFR Part 144, Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General permit conditions for which the content is mandatory and not subject to site-specific differences are not discussed in this document. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize injury to persons or property or invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. (40 CFR §144.35) An EPA UIC Permit may be issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR §144.39, 144.40 and 144.41, and may be reviewed at least once every five (5) years to determine if action is required under 40 CFR §144.36(a).

This Permit is issued for the life of the well(s) unless modified, revoked and reissued, or terminated under 40 CFR §144.39 or 144.40. This EPA Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for a UIC Program is delegated to an Indian Tribe or State. Upon the effective date of delegation, reports, notifications, questions and other correspondence should be directed to the Indian Tribe or State Director.

Issue Date: JAN 0.9 2010 Effective Date

Stephen S. Tuber
Assistant Regiona

Assistant Regional Administrator*

Office of Partnerships and Regulatory Assistance

*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

PART II. SPECIFIC PERMIT CONDITIONS

Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

1. Casing and Cement.

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

2. Injection Tubing and Packer.

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

3. Sampling and Monitoring Devices.

The Permittee shall install and maintain in good operating condition:

- (a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and
- (b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:
 - (i) on the injection tubing; and
 - (ii) on the tubing-casing annulus (TCA); and
- (c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure (MAIP) specified in APPENDIX C is reached at the wellhead; and
- (d) a non-resettable cumulative volume recorder attached to the injection line.

4. Well Logging and Testing

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

5. Postponement of Construction or Conversion

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of Authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or Authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate may be reissued.

6. Workovers and Alterations

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

Section B. MECHANICAL INTEGRITY

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

- (a) There is no significant leak in the casing, tubing, or packer (Part I); and
- (b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).

Permit

1. Demonstration of Mechanical Integrity (MI).

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

2. Mechanical Integrity Test Methods and Criteria

EPA-approved methods shall be used to demonstrate mechanical integrity. Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are available from EPA and will be provided upon request.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

3. Notification Prior to Testing.

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

4. Loss of Mechanical Integrity.

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit) and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

Section C. WELL OPERATION

INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.

Injection is approved under the following conditions:

1. Requirements Prior to Commencing Injection.

Well injection, including for new wells authorized by an Area Permit under 40 CFR 144.33 (c), may commence only after all well construction and pre-injection requirements herein have been met and approved. The Permittee may not commence injection until construction is complete, and

- (a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-10 or 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and
 - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit, or
 - (ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

As described in Appendix B, the permittee must collect a representative, isolated sample of injection zone formation water and analyze for naturally occurring hydrocarbons. The following procedure describes how all water samples will be analyzed for hydrocarbon content:

The water sample will be captured in a container while maintaining a volume of empty headspace in the container above the water sample. The headspace volume will be tested using gas chromatography for methane, ethane, propane, iso-butane, butane, iso-pentane, and pentane resulting from the degassing of any dissolved gases from the water into the headspace of a sampling container. To analyze for other hydrocarbons, the water sample will be solvent extracted with dichloromethane (DCM). The resulting extract will be analyzed by gas chromatography. These results will be submitted to the appropriate offices of BLM and EPA within thirty days of the completion of the specified laboratory analyses.

2. Injection Interval.

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

In order to establish how the Bird's Nest reacts to injection, permit conditions will require the injection well to undergo monitoring of annual fluid levels. During these tests, the injection well is shut-in and the static fluid level is allowed to stabilize. After the fluid level has stabilized, the static fluid level is measured, cumulative injected volume determined, and the fluid in the well is sampled and analyzed for specific gravity in order to determine the pressure in the Bird's Nest. This information will be tracked year-to-year in order to show the buildup of pressure in the Bird's Nest and the relationship between that pressure and the cumulative volume of fluid injected into the disposal well.

3. Injection Pressure Limitation

- (a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into a USDW.
- (b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permitee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

4. Injection Volume Limitation.

Injection volume is limited to the total volume specified in APPENDIX C.

5. Injection Fluid Limitation.

Injected fluids are limited to those which are brought to the surface in connection with conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). The well also may be used to inject approved Class II wastes brought to the surface such as drilling fluids and spent well completion, treatment and stimulation fluids. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved. This well is NOT approved for commercial brine or other fluid disposal operation.

Injected fluids are limited to those which are brought to the surface in connection with conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). The well also may be used to inject approved Class II wastes brought to the surface such as drilling fluids and spent well completion, treatment, and stimulation fluids. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, and NOT approved. This well is NOT approved for commercial brine or other fluid disposal operation.

The source of injected fluids is limited to oil and gas production wells operated by the permittee within the Natural Buttes field.

6. Tubing-Casing Annulus (TCA)

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

1. Monitoring Parameters, Frequency, Records and Reports.

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

- (a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;
- (b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and:

(c) the analytical techniques or methods used for analysis.

2. Monitoring Methods.

- (a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.
- (b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.
- (c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.
- (d) Pressures are to be measured in pounds per square inch (psi).
- (e) Fluid volumes are to be measured in standard oil field barrels (bbl).
- (f) Fluid rates are to be measured in barrels per day (bbl/day).

3. Records Retention.

- (a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.
- (b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.

4. Annual Reports.

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D. The report of fluids injected during the year must identify each new fluid source by well name and location, and the field name or facility name.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

Section E. PLUGGING AND ABANDONMENT

1. Notification of Well Abandonment, Conversion or Closure.

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

2. Well Plugging Requirements

Prior to abandonment, the injection well shall be plugged with cement in a manner which isolates the injection zone and prevents the movement of fluids into or between underground sources of drinking water, and in accordance with 40 CFR 146.10 and other applicable Federal, State or local law or regulations. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director.

3. Approved Plugging and Abandonment Plan.

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

4. Forty Five (45) Day Notice of Plugging and Abandonment.

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abanonment plan.

5. Plugging and Abandonment Report.

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

(a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or

(b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

6. Inactive Wells.

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

- (a) Provides written notice to the Director;
- (b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and
- (c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

PART III. CONDITIONS APPLICABLE TO ALL PERMITS

Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of any other Federal, State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

Section B. CHANGES TO PERMIT CONDITIONS

1. Modification, Reissuance, or Termination.

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

2. Conversions.

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

3. Transfer of Permit.

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

4. Permittee Change of Address.

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

5. Construction Changes, Workovers, Logging and Testing Data

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging, or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this Permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

Section C. SEVERABILITY

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

Section D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

Section E. GENERAL PERMIT REQUIREMENTS

1. Duty to Comply.

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

2. Duty to Reapply.

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

3. Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

4. Duty to Mitigate.

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

5. Proper Operation and Maintenance.

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

6. Permit Actions.

This Permit may be modified, revoked and reissued or teminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights.

This Permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information.

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

9. Inspection and Entry.

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

10. Signatory Requirements.

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

11. Reporting Requirements.

- (a) Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.
- (b) Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Monitoring Reports. Monitoring results shall be reported at the intervals specified in this Permit.
- (d) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.
- (e) Twenty-four hour reporting. The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:
 - (i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or
 - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- (f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website http://www.nrc.uscg.mil/index.htm.
- (g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.
- (h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

Section F. FINANCIAL RESPONSIBILITY

1. Method of Providing Financial Responsibility.

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

2. Insolvency.

In the event of:

- (a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or
- (b) suspension or revocation of the authority of the trustee institution to act as trustee; or

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(c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

APPENDIX A

WELL CONSTRUCTION REQUIREMENTS

See diagram.

The NBU 921-33J Salt Water Disposal (SWD) well was drilled to a total depth of 9,400 feet (KB) in the Mesa Verde Formation.

Surface casing (9-5/8 inch) was set at a depth of 2,550 feet (KB) in a 12-1/4 inch hole 680 sacks of Class G and Hifill cement, which was both circulated up and pumped down from the top in two stages.

Production Casing (4-1/2 inch) was set at a depth of 9,400 feet (KB) in a 7-7/8 inch hole with 535 sacks of Premium Lite II and 1,475 sacks of 50/50 POZ mix.

EPA calculates the top of production casing cement as at the surface. The Cement Bond Log (CBL) identifies the top of cement at 260 feet.

During the well conversion process, several plugs will be set as described in Appendix E. Perforations will be added in the Bird's Nest Member of the Green River Formation. The top perforation will be at approximately 1,696 feet, and the bottom perforation at approximately 1,947 feet.

The packer will be set no higher than 100 feet above the top perforation. The injection well will be completed with 2-7/8 inch tubing with the TK liner system (an amine cured glass reinforced epoxy).

WELL: NBU 921-33.)
FIELD: NATURAL BUTTES
-API # 43-047-36394
LEASE #: STUD-015630-ST EPA PERMIT #:

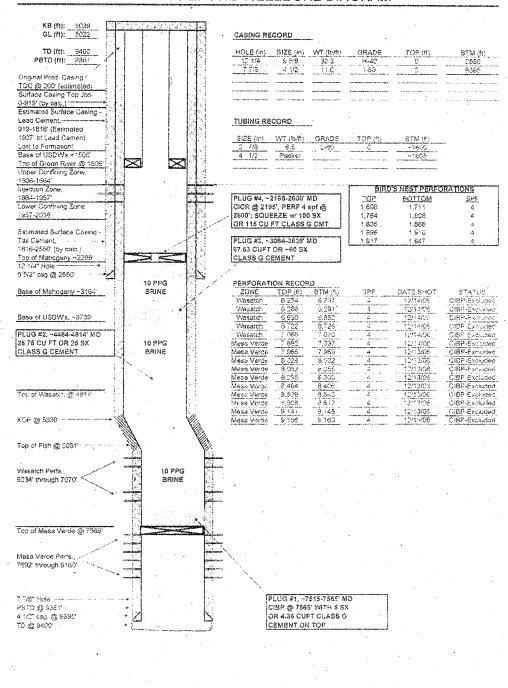
CNTY: UINTAH STATE: UTAH

Q-Q: ·

2113" FSL & 1951" FEL

NWSE 33 SEC.:

PROPOSED SWD WELLBORE DIAGRAM



T21190-08170 - 33] wellbore diagram.jpg

APPENDIX B

LOGGING AND TESTING REQUIREMENTS

Logs.

Logs will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

| TYPE OF LOG | DATE DUE |
|-------------|--|
| RATS | AOR Well NBU 921-33l: Prior to receiving authorization to inject. |
| RATS | AOR Well NBU 921-330: Prior to receiving authorization to inject. |
| TEMP | Injection Well: Prior to receiveing authorization to inject and at least once annually. |
| RATS | Injection Well: Prior to receiveing authorization to inject |
| TEMP | AOR Well NBU 921-33l: Prior to receiving authorization to inject and at least once annually thereafter. Log should be run from 100 ft below lower confining zone to the surface. |
| ТЕМР | AOR Well NBU 921-330: Prior to receiving authorization to inject and at least once annually thereafter. Log should be run from 100 ft below lower confining zone to the surface. |

Tests.

Tests will be conducted according to current UIC guidance. It is the responsibility of the Permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

| VELL NAME: NBU 921-33J SWD | |
|-----------------------------|--|
| TYPE OF TEST | DATE DUE |
| Pressure Fall-Off Test | Injection Well: Prior to receiving authorization to inject. The Presure Fall-Off Test shall be performed following an approved EPA procedure. |
| Injection Zone Water Sample | Injection Well: Prior to receiving authorization to inject, a representative sample (collected according to procedure in statement of basis) from the injection zone will be analyzed for TDS, pH, Spec Grav, Spec Cond, and naturally occurring hydrocarbons. |
| Standard Annulus Pressure | Injection Well: Prior to receiving authorization to inject and at least once every five (5) years after the last successful demonstration of Part I Mechanical Integrity. |
| Pore Pressure | Injection Well: Prior to receiveing authorization to inject (baseline) and at least annually to gauge how the birds nest formation reacts to injection. |
| Step Rate Test | Injection Well: Prior to receiving authorization to inject and at least annually. The SRT shall be performed following current EPA guidance. |
| Injectate Sample | Injection Well: A random, representative sample of the injection water will be collected annually at the sampling tap as described in the permit and analyzed for hydrocarbon content via the method found in Part II Section C.1 of the permit. |

APPENDIX C

OPERATING REQUIREMENTS

MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

| 1 Walter Commission of the Com | |
|--|---|
| MAXIMUM ALLOWED INJECTION PRESSURE (| (psi) |
| ZONE 1 (Upper) | |
| 185 | |
| - | MAXIMUM ALLOWED INJECTION PRESSURE (ZONE 1 (Upper) |

INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

| • | | |
|----------|----------------|--|
| APPROVE | INJECTION | FRACTURE |
| INTERV | AL (KB, ft) | GRADIENT |
| TOP | BOTTOM | (psi/ft) |
| 1.664.00 | - 1.957.00 | |
| | INTERV. TOP | APPROVED INJECTION INTERVAL (KB, ft) TOP BOTTOM 1.664.00 - 1.957.00 |

ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

APPENDIX D

MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

| OBSERVE AND RECORD | Injection pressure (psig) |
|--------------------------|---|
| | Annulus pressure(s) (psig) |
| | Injection rate (bbl/day) |
| | Fluid volume injected since the well began injecting (bbls) |

| · · | ANNUALLY | |
|---------|--|--|
| | Injected fluid total dissolved solids (mg/l) | alaman di dikan di bersalar kan kan kan kan kan di kanan di kelangan di kelangan bersalah bersalah kengan bers Kelangan di bersalar kengan bersalah kengan bersalah kengan di kengan bersalah bersalah bersalah kengan bersal |
| ANALYZE | Injected fluid specific gravity | |
| ANALYZE | Injected fluid specific conductivity | The second of th |
| | Injected fluid pH | |

| | ANNUALLY |
|--------|--|
| | Each month's maximum and averaged injection pressures (psig) |
| | Each month's maximum and minimum annulus pressure(s) (psig) |
| REPORT | Each month's injected volume (bbl) |
| REPORT | Fluid volume injected since the well began injecting (bbl) |
| : | Written results of annual injected fluid analysis |
| | Sources of all fluids injected during the year |

In addition to these items, additional Logging and Testing results may be required periodically. For a list of those items and their due dates, please refer to APPENDIX B - LOGGING AND TESTING REQUIREMENTS.

APPENDIX E

PLUGGING AND ABANDONMENT REQUIREMENTS

See diagram.

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local laws or regulations. Tubing, packer, and other downhole apparatus shall be removed. Class A, C, G, and H cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging unless a cast iron bridge plug or cement retainer is used. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. Within sixty (60) days after plugging, the owner or operator shall submit the Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

PLUG NO. 1: Isolate Lower Perforations: Set a cast iron bridge plug (CIBP) at 7,565 feet with at least 50 feet of cement on top (approx 5 sxs).

PLUG NO. 2: Seal Base Green River/Top of Wasatch: Perforate and squeeze cement up the backside of the casing across the contact between the Green River Formation and Wasatch Formation at 4,814 ft. (KB) unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 200-foot plug inside casing across the Top of the Wasatch Formation from 4,714 - 4,914 feet using approximately 25 sxs of cement.

PLUG NO. 3: Isolate USDWs and the Mahogany Oil Shale: Perforate and squeeze cement up the backside of the casing across the base of USDWs (according to Publication 92) at 3,739 ft. (KB) unless pre-existing backside cement precludes cement-squeezing this interval. Set a minimum 775-foot plug inside casing across the base of USDWs and the base of the Mahogany Oil Shale from 3,064 -3,839 feet using approximately 60 sxs of cement.

PLUG NO. 4: Seal Surface Casing and Top of Mahogany Oil Shale: Set a cast iron cement retainer (CICR) at 2,195 feet (100 feet above the top of the Mahogany Oil Shale). Squeeze perforated intervals below the retainer. Cement should extend below the CICR to approximately 2,600 feet, or 50 feet below the surface casing shoe (approximately 100 sxs).

Note: The plugs described above will be placed during the well's conversion.

Prior to Final P&A: Perform Mechanical Integrity Test; Pull tubing and packer; Repair any casing leaks.

PLUG NO. 5: Seal Green River and Injection Zone: Set a CICR at 1,395 feet (approximately 100 feet above the top of the Green River). Squeeze perforated intervals below the retainer. Cement should extend below the CICR to approximately 2,038 feet or the base of the lower confining zone (approximately 75 sxs).

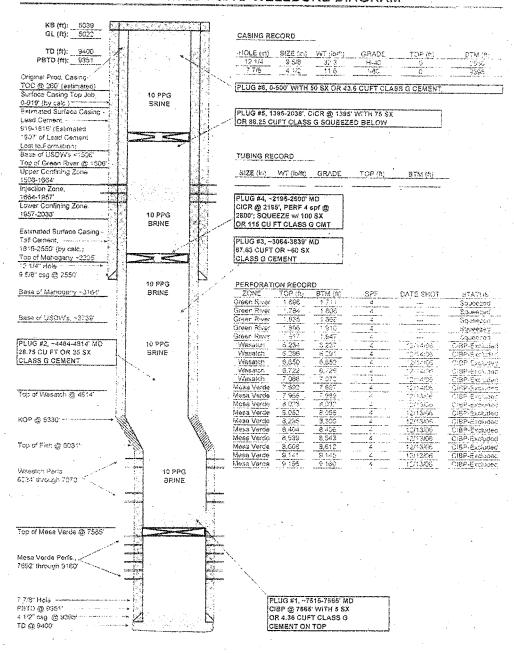
PLUG NO. 6: Seal surface: Squeeze cement behind 9-5/8 inch casing from 500 feet to the surface, and set a cement plug within the 9-5/8 inch casing from 500 feet to the surface (approximately 50 sxs).

Remove wellhead and install P&A marker.

WELL: NBU 921-33J
FIELD: NATURAL BUTTES
API # 43-047-36594
LEASE #: STUC-015630-ST
EPA PERMIT #:

CNTY: UINTAH STATE: UTAH FT.: 2113 FSL & 1951 FEL G-Q: NWSE SEC.: 33 TWS: 95 RGE: 21E

PROPOSED P&A'D WELLBORE DIAGRAM



UT21190-08170 - 33J P&A diagram.jpg

APPENDIX F

CORRECTIVE ACTION REQUIREMENTS

CORRECTIVE ACTION FOR NBU 921-33J (Proposed Injection Well):

A Radioactive Tracer Survey (RTS) is required to prove fluid confinement within the proposed injection zone (1,664'-1,957'), as described in Appendix B. The RTS shall be run according to EPA Region 8 guidelines. Additional remedial activity will be contingent upon RTS results.

CORRECTIVE ACTION FOR NBU 921-33I (AOR Well for NBU 921-33J and Proposed Injection Well under EPA UIC Permit UT21188-08168):

A Radioactive Tracer Survey (RTS) is required to prove fluid confinement within the proposed injection zone.

If permission to convert this well to a salt water disposal well is received, a remedial cement job should first be performed as described in EPA UIC Permit UT21188-08168. The RTS should then be run after all injection perforations are created to prove confinement at both the upper and lower confining zones. The RTS shall be run according to EPA Region 8 guidelines.

If this well is not converted to an injection well, the RTS should be run at perforations created at the top and base of the Bird's Nest Zone using a similar procedure to that described for AOR Well NBU 921-33O below.

In either case, additional remedial activity will be contingent upon RTS results.

CORRECTIVE ACTION FOR NBU 921-330 (AOR Well for NBU 921-33J):

A Radioactive Tracer Survey is required to prove fluid confinement within the proposed injection zone as follows:

Perforate at the top (approx. 1,670) and at the base (approx. 1,955') of the Bird's Nest Zone. Set RBP at approx. 2,100' and packer at approx 1,800' and conduct radioactive tracer survey to demonstrate fluid confinement above 1,969' by the lower confining zone. Release Tools. Reset RBP at approx. 1,750' and packer at 1,600' and conduct radioactive tracer survey to demonstrate fluid confinement below 1,668' by the upper confining zone. Release Tools. Remedial activity will be contingent upon RTS results. Squeeze perforations at 1,955' and 1,670'.

ANNUAL TEMPERATURE LOGGING FOR AOR WELLS NBU 921-331 and NBU 921-330:

The cement bond log for these wells do not demonstrate that there is adequate cement through the upper and lower confining zones. For this reason, as shown in Appendix B, these wells shall undergo annual temperature logging as proof that they are completed in a manner that prevents fluids within the injection formation from migrating above or below the Birds Nest through pathways behind the AOR well's surface

casing.

This log shall be submitted annually to the Director as part of the Annual Report.

If the results of the Temperature logs show any indication of Birds Nest formation fluids moving out of zone, injection shall be shut-in and corrective action may be required in order to ensure that Birds Nest fluids remain within the Birds Nest and do not migrate out of the approved injection zone.

STATEMENT OF BASIS

KERR-MCGEE OIL & GAS ONSHORE, LP NBU 921-33J SWD UINTAH COUNTY, UT

EPA PERMIT NO. UT21190-08170

CONTACT: Sarah Bahrman

U. S. Environmental Protection Agency Ground Water Program, 8P-W-GW

1595 Wynkoop Street

Denver, Colorado 80202-1129

Telephone: 1-800-227-8917 ext. 312-6243

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

EPA UIC permits regulate the injection of fluids into underground injection wells so that the injection does not endanger underground sources of drinking water. EPA UIC permit conditions are based upon the authorities set forth in regulatory provisions at 40 CFR Parts 144 and 146, and address potential impacts to underground sources of drinking water. Under 40 CFR 144.35 Issuance of this permit does not convey any property rights of any sort or any exclusive privilege, nor authorize injury to persons or property of invasion of other private rights, or any infringement of other Federal, State or local laws or regulations. Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which the content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

PART I. General Information and Description of Facility

Kerr-McGee Oil & Gas Onshore, LP 1368 South 1200 East Vernal, UT 84078

on

April 1, 2008

submitted an application for an Underground Injection Control (UIC) Program Permit or Permit Modification for the following injection well or wells:

NBU 921-33J SWD 2240 ft FSL & 878 ft FEL, NWSE S33, T9S, R21E Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The application, including the required information and data necessary to issue or modify a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed and determined by EPA to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

TABLE 1.1 WELL STATUS / DATE OF OPERATION

NEW WELLS

Well Name

Well Status

Date of Operation

NBU 921-33J SWD

New

N/A

PART II. Permit Considerations (40 CFR 146.24)

Hydrogeologic Setting

Geologic Setting (TABLE 2.1)

THE UINTA FORMATION (0'-1,506')

The Uinta Formation is calcareous shale, some limestone, claystone, siltstone, and sandstone. It is a fluvial facies in the eastern and western ends of the basin that interfingers with rocks similar in appearance to the overlying Duchesne River Formation. It grades laterally into thinner bedded calcareous lake deposits in the center of the basin.

The Uinta is very low to very high permeability. Largest primary intergranular permeability of the sandstone seems to be about the same as that of the median for sandstone in the Duchesne River Formation. Most of the formation is finer grained, and, therefore, of lower primary permeability than the Duchesne River Formation. Permeability is greatly increased where the Uinta Formation is fractured. In most of the area, the formation yields only a few gallons per minute of saline water to wells and springs. In some areas the water has high fluoride and boron concentrations. Locally, flowing wells yield fresh to slightly saline water. In the fluvial facies, particularly where the rocks are fractured, yields are larger.

THE GREEN RIVER FORMATION (1,506'- 4,814')

The Green River Formation is mostly lacustrine shale that contains some limestone, marlstone, and siltstone. The formation includes beds of oil shale and of carbonate evaporite. The Green River interfingers with both the overlying Uinta and the underlying Wasatch Formations, as well as laterally with other formations near the edges of the basin.

The Green River Formation is very low to low permeability except where fractured. Sandstones near oil-shale beds have values of transmissivity from 0.9 to 2.4 sq ft/day. In most of the basin the formation yields only saline or briny water, though in and near the areas of outcrop in the southern part of the basin the water is fresh to slightly saline, and in the area of the outcrop near Strawberry Reservoir the water is fresh where the formation is fractured.

BIRDS NEST MEMBER OF THE GREEN RIVER FORMATION (1,664'-1,957')

The Bird's Nest member (the proposed injection interval) occurs within the Green River formation. The Bird's Nest occurs at a depth between 1,664'-1,957' at the site of the injection well. The Bird's Nest consists of nahcolite nodules set in maristone overlain by a zone of thin, brittle shale beds, and by a fine-grained homogeneous sandstone.

THE WASATCH FORMATION (4,814'-7,565')

In most of the basin, the Wasatch Formation is mainly lacustrine shale, sandstone, and conglomerate. It interfingers with the overlying and underlying formations and laterally with the North Horn, Currant Creek, and Green River Formations. The Wasatch outcrops only in the far eastern end of the northern Uinta Basin and in the canyons of deeply incised streams in the southern Uinta Basin.

The Wasatch Formation has very low to low permeability except where fractured. In the Greater Altamont-Bluebell oil field, the Wasatch sands reportedly have only 4 to 5 percent porosity, but are permeable because of fracturing. Much of the water produced with petroleum is moderately saline to very saline; generally, however, the water is less mineralized than is water from the Green River Formation.

THE MESA VERDE FORMATION (7,595'- approx. 9,400')

Continental deposits of shale, sandstone, and coal beds. Interfingers with the upper part of the underlying Mancos Shale and may interfinger with the overlying Currant Creek and North Horn Formations. Maximum thickness ranges from 550 to 4,000 feet in the western part of the basin, and from 400 to 1,160 feet in the eastern part of the basin.

Very low to high permeability. In areas of outcrop, water in the formation is fresh to slightly saline, but samples of water from petroleum tests in the eastern part of the basin reportedly were very saline to briny.

TABLE 2.1 GEOLOGIC SETTING NBU 921-33J SWD

| Formation Name | Top (ft) | Base (ft) | TD\$ | 5 (mg/l) | Lithology |
|-----------------------------------|----------|-----------|------|----------|--|
| Uinta | 0 | 1,506 | < | 10,000 | Calcerous shale, some limestone, claystone, siltstone, and sandstone. |
| Green River: USDW Base (Pub 92) | 1,506 | 3,739 | < | 10,000 | Mostly lacustrine shale that contains some limestone, marlstone, and siltstone. |
| Green River | 1,506 | 4,814 | > | 10,000 | Mostly lacustrine shale that contains some limestone, marlstone, and siltstone. |
| Green River: Upper Confining Zone | 1,506 | 1,664 | > | 10,000 | Interbedded impermeable lacustrine shales, impermeable maristones and low porosity siltstones. |
| Green River: Birds Nest | 1,664 | 1,957 | > | 10,000 | Carbonate. |
| Green River: Lower Confining Zone | 1,957 | 2,038 | > | 10,000 | Interbedded impermeable calcerous shales with minor amounts of low porosity siltstones. |
| Mahogany Bench | 2,269 | 3,164 | > | 10,000 | Oil Shale. |
| Wasatch | 4,814 | 7,565 | > | 10,000 | Brackish-water sandstone, sandy shale, carbonaceous shale, and coal. |
| Mesa Verde | 7,565 | | > | 10,000 | Shale, sandstone, and coal beds. |

Proposed Injection Zone(s) (TABLE 2.2)

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by a confining zone which is free of known open faults or fractures within the Area of Review.

The proposed injection into the Bird's Nest formation is of concern to nearby oil-shale mining interests in the area. In order to establish how the Bird's Nest reacts to injection, annual monitoring will be required as described in Part VI of this Statement of Basis.

TABLE 2.2 INJECTION ZONES NBU 921-33J SWD

| Formation Name | Top (ft) | Base (ft) | TDS (mg/l) | | Fracture Gradient (psi/ft) | Porosity | Exempted?* |
|-------------------------|----------|-----------|------------|-------|----------------------------------|----------|------------|
| Green River: Birds Nest | 1,664 | 1,957 | > 1 | 0,000 | | | N/A |

^{*} C - Currently Exempted

- **E Previously Exempted**
- P Proposed Exemption
- N/A Not Applicable

Confining Zone(s) (TABLE 2.3)

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

The upper confining zone is located between the depths of 1,506' to 1,664'. The upper confining zone consists of interbedded impermeable lacustrine shales, impermeable marlstones and low porosity siltstones. Density porosities in the siltstones (assuming 2.65 g/cc matrix density) range from 3 to 6%.

The lower confining zone is located between the depths of 1,957' to 2,038'. The lower confining zone consists of interbedded impermeable calcerous shales with minor amounts of low porosity siltstones. The lower confining zone is needed to protect the underlying Mahogany Shale.

TABLE 2.3 CONFINING ZONES NBU 921-33J SWD

| Formation Name | me Formation Lithology | | Base (ft) |
|--------------------------------------|--|-------|-----------|
| Green River: Upper Confining Zone | Interbedded impermeable lacustrine shales, impermeable marlstones and low porosity siltstones. | 1,506 | 1,664 |
| Green River: Lower Confining Zone | Interbedded impermeable calcerous shales with minor amounts of low porosity siltstones. | 1,957 | 2,038 |

Underground Sources of Drinking Water (USDWs) (TABLE 2.4)

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

The location of USDWs has been predicted from the State of Utah Technical Publication No. 92 entitled "Base of Moderately Saline Ground Water in the Uinta Basin, Utah," U.S. Geologic Survey

Open File Report 87-394. This prediction identified the depth of 3,739' below the ground level as the probable base of USDWs in the area, with the USDWs being interspersed above this base. The top of the Bird's Nest injection zone is estimated to be above this depth. Thus, an injection zone water sample will be required prior to receiving authorization to inject to determine whether the Total Dissolved Solids (TDS) of the injection zone is below 10,000 mg/L. If the TDS is below 10,000 mg/L, , the permittee will be required to submit a request for an aquifer exemption for the injection zone. This request must substantiate the criteria for why the aquifer should be exempted as allowed under 40 CFR 146.4.

TABLE 2.4 UNDERGROUND SOURCES OF DRINKING WATER (USDW) NBU 921-33J SWD

| Formation Name | Formation Lithology | Top (ft) | Base (ft) | TDS | (mg/l) |
|---------------------------------|---|----------|-----------|-----|--------|
| Uinta | Calcerous shale, some limestone, claystone, siltstone, and sandstone. | 0 | 1,506 | < | 10,000 |
| Green River: USDW Base (Pub 92) | Mostly lacustrine shale that contains some limestone, marlstone, and siltstone. | 1,506 | 3,739 | < | 10,000 |
| | silisione. | | | | |

PART III. Well Construction (40 CFR 146.22)

TABLE 3.1 WELL CONSTRUCTION REQUIREMENTS NBU 921-33J SWD Hole Casing Cased Cemented Casing Type Size (in) Size (in) Interval (ft) Interval (ft) Surface 12.25 9.63 0 - 2,550 0 - 2,550Longstring 7.88 4.50 0 - 9,395 260 - 9.400

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

Casing and Cementing (TABLE 3.1)

The construction plan for the well or wells proposed for conversion to an injection well was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction and conversion details for the well or wells are shown in TABLE 3.1.

The cement bond log does not show 80% or greater bonding for 15 continuous feet through the upper or lower confining zones. Thus, annual Temperature Logs are required as described in Appendix B to prove confinement of fluids within the injection interval (Part II Mechanical Integrity).

Tubing and Packer

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

Tubing-Casing Annulus (TCA)

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

Monitoring Devices

The permittee will be required to install and maintain wellhead equipment that allows for monitoring pressures and providing access for sampling the injected fluid. Required equipment may include but is not limited to: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) fittings or pressure gauges attached to the injection tubing and the TCA for monitoring the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

| TABLE 4.1 AOR AND CORRECTIVE ACTION | | | | | | |
|-------------------------------------|----------|---------------------------|---------------------|-------------------|-----------------------|--|
| Well Name | Туре | Status (Abandoned Y/N) | Total Depth (ft) | TOC Depth (ft) | CAP Required (Y/N) | |
| NBU 921-33I | Producer | No | 9,750 | 1,650 | Yes | |
| NBU 921-33O | Producer | No | 9,700 | 0 | Yes | |

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

Area Of Review

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

Temperature Logging for Area of Review (AOR) wells NBU 921-331 and NBU 921-330:

Although each of the wells in the area of review is shown to contain a volume of cement necessary to cover the Bird's Nest injection zone, cementing records indicate that there is not adequate cement across the upper and lower confining intervals in the NBU 921-331 and NBU 921-330 AOR wells. For wells designed with surface casing covering the Bird's Nest, a typical cement job involves pumping a volume of cement calculated to circulate cement to the surface. Once primary pumping is complete, pumping ceases and the level of the cement is monitored at the surface. While monitoring, cement typically falls back into the well, presumably into the Bird's Nest. Cement is then added to the annulus at the surface (top job) in several stages until the cement stops falling. Since surface casing strings are rarely logged with cement bond logging tools, there is no direct measurement of the quality of cement behind these casing strings.

In order to verify that these wells are cased and cemented in a manner to prevent fluid movement from the injection formation into USDWs, the NBU 921-33I and NBU 921-33O Area of Review wells are required to undergo annual Temperature logging. Temperature logs will be conducted after the wells are shut-in and the temperature in the wells is recovering to the background temperature. Review of the logging results will be performed to identify any Bird's Nest fluids which appear to be moving out of the Bird's Nest formation through channels behind casing. The results will be evaluated annually to determine if the requirement can be removed.

If the results of Temperature logging shows any indication of Bird's Nest formation fluids moving out of zone, injection shall be shut-in and corrective action performed to ensure that Bird's Nests fluids will remain within the Bird's Nest and will not migrate into USDWs.

The logging program requirements are discussed in the Permit in Appendix B - Logging and Testing Requirements, Appendix D - Monitoring and Reporting Parameters, and in Appendix F - Corrective Action Requirements.

Corrective Action Plan

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

TABLE 4.1 lists the wells in the AOR, and shows the well type, operating status, depth, top of casing cement and whether a CAP is required for this well.

Prior to receiving authorization to inject, a radioactive tracer survey is required to prove fluid confinement within the proposed injection interval. This corrective action plan is incorporated into Appendices B and F.

In addition, two Area of Review (AOR) wells, the NBU 921-33I and NBU 921-33O, require radioactive tracer surveys as demonstration that fluid movement behind pipe is not occurring. This corrective action plan is incorporated into Appendices B and F. If the results of any of the temperature logs or radioactive tracer surveys show any indication of Bird's Nest formation fluids moving out of zone, the injection well shall be shut-in and corrective action will be required in order to ensure that Bird's Nest fluids remain within the Bird's Nest and do not migrate out of the approved injection zone.

PART V. Well Operation Requirements (40 CFR 146.23)

TABLE 5.1 INJECTION ZONE PRESSURES NBU 921-33J SWD

Depth Used Fracture to Calculate Gradient MAIP (ft) (psi/ft)

Initial MAIP (psi)

Formation Name

Green River: Birds Nest

185

Approved Injection Fluid

The approved injection fluid is limited to Class II injection well fluids pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Injection of non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes, and vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste, is prohibited.

A random representative sample of the injection water will be collected annually at the sampling tap as described in the Permit under Part II Section A.3(a) and analyzed for hydrocarbon content in addition to the parameters described in Appendix D.

Pursuant to discussions between EPA, BLM, and the operator, a "Bird's Nest" specific water sampling procedure is required to test for the amount and types of hydrocarbons that will be injected into the Bird's Nest zone after treatment. The procedure in Permit Section C. Paragraph 1 describes how all water samples will be analyzed for hydrocarbon content.

This well is NOT approved for commercial brine injection, industrial waste fluid disposal, or injection of hazardous waste as defined by CFR 40 Part 261. The source of the injected fluids is limited to oil and gas production wells operated by the permittee.

Injection Pressure Limitation

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

Similar injection wells completed into the Bird's Nest have been unable to establish a fracture pressure. These wells initially take fluid on a vacuum, and pressure buildup within the Bird's Nest does not occur during the step-rate test. For that reason, the initial injection pressure is set at 185 psi (equivalent to a formation fracture gradient of 0.550 psi/ft). The 0.550 psi/ft, in comparison with other well-known formation fracture pressures in the Uinta basin, is sufficiently low to ensure that a

185 psi injection pressure is not likely to cause fractures within the Bird's Nest.

Since these wells initially operate on a vacuum, little is known about the Bird's Nest as an injection formation. The operator is required to monitor the pressure in the Bird's Nest annually by recording a stabilized static fluid level.

The results of this fluid level monitoring shall be reported to the Director as part of the required Annual Report.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit.

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

FP = formation fracture pressure (measured at surface)

fg = fracture gradient (from submitted data or tests)

sg = specific gravity (of injected fluid)

d = depth to top of injection zone (or top perforation)

Injection Volume Limitation

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

Mechanical Integrity (40 CFR 146.8)

An injection well has mechanical integrity if:

- 1. there is no significant leak in the casing, tubing, or packer (Part I); and
- 2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependent upon well-specific conditions as explained below.

PART VI. Monitoring, Recordkeeping and Reporting Requirements

Injection Well Monitoring Program

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, annulus pressure, monthly injection flow rate and cumulative fluid volume. This information is required to be reported annually as part of the Annual Report to the Director.

Prior to receiving authorization to inject, the operator will also collect a water sample from the injection zone to be analyzed for TDS, pH, specific gravity, and specific conductivity, and will conduct a background analysis for hydrocarbon content. The following procedure should be used for collecting the injection zone water sample:

- 1.) MIRU workover rig
- 2.) If workover fluid has been pumped into the well for corrective action requirements (i.e. squeeze work, RTS test, etc) near the Birds Nest injection interval, get an accurate record of the volume pumped to account for and also obtain a sample of the workover fluid for reference purposes.
- 3.) RIH with tubing to the ±top of the injection interval. Rig up swab equipment and swab the fluid level to 500' above injection zone interval so the well can be perforated under-balanced.
- 4.) POOH with the tubing
- 5.) RIH and under-balance perforate the Birds Nest injection interval with the appropriate sized guns. POOH with the perforating guns.
- 6.) RIH with tubing to the ±top of the injection interval
- a. Obtain mid-perf pressure and temperature measurements at this time with down hole pressure tools via wire line. POOH with the pressure tools.
- 7.) R/U to Swab or air lift fluids in the well to get a representative fluid sample of the injection interval. NOTE: It may be necessary to break-down and/or acidize the perforations in order obtain adequate fluid entry into the wellbore.
- a. Take regular samples and monitor chlorides and pH of the water. Record the regular measurements in a table.
- b. Continue swabbing or air lifting the well until all fluid that has been put into the well from corrective action operations has been accounted for.
- NOTE: A minimum of twice the volume of load water will be produced prior to sampling.
- c. Once the chlorides and pH have stabilized and look to be representative of the Birds Nest injection zone interval, take three last successive samples (plus selected previous samples for comparisons) in for complete water analysis to measure for TDS, pH, SG, and conductivity. Record the three last successive sample measurements in a table.
- d. Wait for the water analysis to come back to confirm that the samples show a stabilized TDS, pH, SG, and conductivity. If samples show consistency, consider the samples to be representative of the Birds Nest injection zone water, otherwise continue to resample.
- 8.) Hang the tubing off at the top of the perforated interval.
- 9.) Secure the location and rig down the workover unit.

Possible conflict with oil-shale mining in the area:

The Bird's Nest member of the Green River formation, proposed for injection, lies approximately 300 ft above the top of the Mahogany Shale formation. The Mahogany Shale is being proposed for oil-shale development in the vicinity of this injection well. Concerns have been raised regarding injection into the Bird's Nest and the effect of that injection on proposed oil-shale mining. Of primary concern is the proximity of the Bird's Nest to the Mahogany shale, and the possibility of the injection increasing water intrusion into the mine works.

Research conducted on this topic may be found in the report, "Final Environmental Baseline

Report - Federal Prototype Oil Shale Leasing Program, Tracts U-a and U-b Utah, White River Shale Project," VTN Colorado, Inc., October 1977. This report, conducted in part to identify potential problems from adjacent aquifers on the proposed mining project, concludes that the "proposed mining program is not expected to create any interconnection between the bird's nest aquifer and the Douglas Creek member nor is it expected to create vertical flow from either aquifer into the mine workings. However, because of the lack of conclusive proof of the separation of aquifers, it would be advantageous to design an intensified monitoring program in the event that large flows are encountered in the workings."

"Providing that there are no subflows from the bird's nest aquifer into the workings, the only effect of development upon the movement of ground water and water level fluctuations will be during the sinking of the mine shaft through the bird's nest aquifer. Inflow to the shaft will be stopped as soon as practicable by cementing and casing as stipulated in the DDP. Inflows to the shaft will be temporary, as will be the effect upon water levels. Specific monitoring should not be necessary for this aspect of development."

Due to the high permeabilities found in the Bird's Nest, the injection wells operate on a vacuum during the early stages of the injection project life. Although each permit requires a well test designed to determine fracture pressures in the Bird's Nest, tests conducted on nearby Bird's Nest injection wells have been unable to build up pressure in the Bird's Nest to a degree needed to determine a fracture pressure.

In order to establish how the Bird's Nest reacts to injection, permit conditions require the injection well to undergo annual fluid level determinations. During these tests, the injection well is shut-in and the static fluid level allowed to stabilize. After the fluid level has stabilized, the static fluid level is measured, cumulative injected volume determined, and the fluid in the well is sampled and analyzed for specific gravity in order to determine the pressure in the Bird's Nest. This information will be tracked year-to-year in order to show the buildup of pressure in the Bird's Nest and the relationship between that pressure and the cumulative volume of fluid injected into the disposal well.

Annually, and in conjunction with the Annual Report to the Director, the results of this monitoring shall be reported to the Director. This report shall include the results of the annual fluid level monitoring in order to determine how the Bird's Nest injection interval responds to the injected volumes.

PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)

Plugging and Abandonment Plan

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520 13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. The plugging and abandonment plan is described in Appendix E of the Permit.

PART VIII. Financial Responsibility (40 CFR 144.52)

Demonstration of Financial Responsibility

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

The applicant has demonstrated financial responsibility by a Surety Bond in the amount of \$59,344 that has been approved by the EPA. Evidence of continuing financial responsibility is required to be submitted to the Director annually. The Director may revise the amount required, and may require the permittee to obtain and provide updated estimates of costs for plugging the well according to the approved Plugging and Abandonment plan.

Surety Bond, received September 22, 2008

Evidence of continuing financial responsibility is required to be submitted to the Director annually.

| STATE OF UTAH | | | FORM 9 | | |
|---|---|--|---|--|--|
| | DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MI | | 5.LEASE DESIGNATION AND SERIAL NUMBER: STUO-015630-ST | | |
| | RY NOTICES AND REPORTS | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | |
| | sals to drill new wells, significantly deepe igged wells, or to drill horizontal laterals. | | 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES | | |
| 1. TYPE OF WELL Gas Well | 8. WELL NAME and NUMBER: NBU 921-33J | | | | |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS | HORE, L.P. | | 9. API NUMBER: 43047363940000 | | |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S | treet, Suite 600, Denver, CO, 80217 377 | PHONE NUMBER: 9 720 929-6007 Ext | 9. FIELD and POOL or WILDCAT: NATURAL BUTTES | | |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 2113 FSL 1951 FEL | | | COUNTY: UINTAH | | |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 33 Township: 09.0S Range: 21.0E Meridian: S | | | STATE: UTAH | | |
| 11. CHE | CK APPROPRIATE BOXES TO INDICA | TE NATURE OF NOTICE, REPORT, | OR OTHER DATA | | |
| TYPE OF SUBMISSION | | TYPE OF ACTION | | | |
| | ☐ ACIDIZE | ☐ ALTER CASING | CASING REPAIR | | |
| NOTICE OF INTENT Approximate date work will start: 3/5/2010 | CHANGE TO PREVIOUS PLANS | CHANGE TUBING | CHANGE WELL NAME | | |
| 3/3/2010 | CHANGE WELL STATUS | ☐ COMMINGLE PRODUCING FORMATIONS | ✓ CONVERT WELL TYPE | | |
| SUBSEQUENT REPORT Date of Work Completion: | DEEPEN | FRACTURE TREAT | NEW CONSTRUCTION | | |
| Date of Work Completion: | OPERATOR CHANGE | PLUG AND ABANDON | ☐ PLUG BACK | | |
| | ☐ PRODUCTION START OR RESUME | RECLAMATION OF WELL SITE | RECOMPLETE DIFFERENT FORMATION | | |
| SPUD REPORT Date of Spud: | ☐ REPERFORATE CURRENT FORMATION | SIDETRACK TO REPAIR WELL | ☐ TEMPORARY ABANDON | | |
| | ☐ TUBING REPAIR | ☐ VENT OR FLARE | ☐ WATER DISPOSAL | | |
| ☐ DRILLING REPORT | ☐ WATER SHUTOFF | SI TA STATUS EXTENSION | APD EXTENSION | | |
| Report Date: | ☐ WILDCAT WELL DETERMINATION | OTHER | OTHER: | | |
| THE OPERATOR REQ | OMPLETED OPERATIONS. Clearly show all per UESTS AUTHORIZATION TO SEE ATTACHED PROCEDURE | CONVERT THIS WELL TO A FOR OPERATION DETAILS I Oi | | | |
| NAME (PLEASE PRINT) Andy Lytle | PHONE NUMBE 720 929-6100 | R TITLE Regulatory Analyst | | | |
| SIGNATURE N/A | | DATE 3/2/2010 | | | |

NBU 921-33J 2113' FSL & 1951' FEL NWSE SEC. 33 - T9S - 21E **Uintah County, UT**

KBE: 5039' GLE: 5022' TD: 9400' PBTD: 9351' API NUMBER: 43-047-36394 **LEASE NUMBER:** WI: 100%

STUO-015630-ST

NRI: ORRI: 80.702950% 9.547750%

CASING:

12.25" hole

9.625" 32.3# H-40 @ 2550'

Cemented with 230 sx (878 cuft) HiFill lead, 200 sx (230 cuft) Class G tail. Pumped top jobs using 250 sx (288 cuft) Class G in two stages. Hole stayed full,

TOC @ surface.

7.875" hole

Original wellbore, 2550-9700', TOF @ 6031' - see 11/21/2006 sundry notice for description of fish. Cement plug from 6031' to KOP @ 5330'.

Sidetrack wellbore, 5330' to 9400'.

4.5" 11.6# I-80 @ 9395'

Cemented with 535 sx (1348 cuft) Premium Lite II lead and 1475 sx (1932 cuft)

50-50 pozmix tail. TOC @ 260' by CBL.

TUBING: 2.375" 4.7# J-55 tubing at 8212'

| Tubular/Borehole | Drift | Collapse | Burst | Capacities | | |
|-------------------------------|------------|----------|-------|------------|----------|----------|
| | inches | psi | Psi | Gal./ft. | Cuft/ft. | Bbl./ft. |
| 2.375" 4.7# J-55 tbg. | 1.901 | 8100 | 7700 | 0.1626 | 0.02173 | 0.00387 |
| 4.5" 11.6# N/M/I-80 csg | 3.875 | 6350 | 7780 | 0.6528 | 0.0872 | 0.01554 |
| 9.625" 32.3# H-40 csg | 8.845 | 1400 | 2270 | 3.3055 | 0.4418 | 0.0787 |
| Annular Capacities | | | | • | | |
| 2.375" tbg. X 4.5" 11.6# csg | <u></u> Ţ. | | | 0.4226 | 0.0565 | 0.01006 |
| 4.5" csg. X 9.625" 32.3# csg. | | | | 2.4780 | 0.3314 | 0.0590 |
| 4.5" csg. X 7.875" hole | | | | 1.7052 | 0.2278 | 0.0406 |
| 9.625" csg. X 12.25" hole | | | | 2.3436 | 0.3132 | 0.0558 |

GEOLOGIC INFORMATION:

| Formation | Depth to top, ft. |
|-------------|-------------------|
| Uinta | Surface |
| Green River | 1506' |
| Wasatch | 4814' |
| Mesa Verde | 7565' |

Tech. Pub. #92 Base of USDW's

USDW Elevation ~1500' MSL USDW Depth ~3522' GLE

The estimated USDW depth from Technical Publication #92 is inconsistent with Birds Nest water samples from numerous wells in the vicinity.

WELL LOGS:

- Halliburton GR-SP-IEL (2535-9374') and GR-CNL-FDC (2535-9347'), dated 11/24/2006.
- Cutters Wireline Service GR-CBL-CCL (30-9236'), dated 12/11/2006.

Geologic markers were correlated from the gamma ray. There is no CBL for the surface casing and the bond index across the intervals of interest for the production casing will not calculate an 80% bond index or greater based on EPA guidance.

PERFORATIONS:

| Formation | Date | Тор | Bottom | SPF | STATUS |
|------------|------------|------|--------|-----|--------|
| | | | | | |
| Wasatch | 12/14/2006 | 6234 | 6237 | 4 | Open |
| Wasatch | 12/14/2006 | 6286 | 6291 | 4 | Open |
| Wasatch | 12/14/2006 | 6650 | 6652 | 4 | Open |
| Wasatch | 12/14/2006 | 6722 | 6726 | 4 | Open |
| Wasatch | 12/14/2006 | 7066 | 7070 | 4 | Open |
| Mesa Verde | 12/14/2006 | 7692 | 7697 | 4 | Open |
| Mesa Verde | 12/13/2006 | 7966 | 7969 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8028 | 8032 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8052 | 8055 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8295 | 8300 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8404 | 8406 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8539 | 8543 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8608 | 8612 | 4 | Open |
| Mesa Verde | 12/13/2006 | 9141 | 9145 | 4 | Open |
| Mesa Verde | 12/13/2006 | 9156 | 9160 | 4 | Open |

RECEIVED March 02, 2010

WELL HISTORY:

Completion – December 2006

- Perforated the gross Mesa Verde interval 9141' through 9160' and fractured with 2009 bbl gel containing 233825# 20/40 sand.
- Perforated the gross Mesa Verde interval 8404' through 8612' and fractured with 1050 bbl gel containing 130659# 20/40 sand.
- Perforated the Mesa Verde interval 8295-8300' and fractured with 437 bbl gel containing 39350# 20/40 sand.
- Perforated the gross Mesa Verde interval 7966' through 8055' and fractured with 3122 bbl gel containing 333450# 20/40 sand.
- Perforated the Mesa Verde interval 7692-7697' and fractured with 403 bbl gel containing 39740# 20/40 sand.
- Perforated the gross Wasatch interval 6650' through 7070' and fractured with 820 bbl gel containing 99506# 20/40 sand.
- Perforated the gross Wasatch interval 6234' through 6291' and fractured with 575 bbl gel containing 88543# 20/40 sand.
- Drilled out to PBTD' and landed tubing at 8212'.
- Tested 1071 MCFD, 0 BOPD, 750 BWPD, 578 psi FTP, 1455 psi SICP, 22/64th choke on 1/3/2007.

EPA PERMIT #:

WELL: NBU 921-33J
FIELD: NATURAL BUTTES
API # 43-047-36394
LEASE #: STUO-015630-ST

CNTY: UINTAH STATE: UTAH FT.:

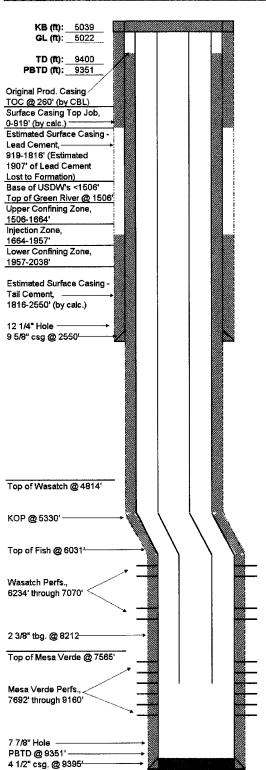
RGE:

2113' FSL & 1951' FEL

Q-Q: NWSE SEC.: 33 TWS: 98

21E

CURRENT WELLBORE DIAGRAM



TD @ 9400'

CASING RECORD

| | HOLE (in) | SIZE (in) | WT (lb/ft) | GRADE | TOP (ft) | BTM (ft) |
|---|-----------|-----------|------------|---------------|----------|----------|
| | 12 1/4 | 9 5/8 | 32.3 | H-40 | 0 | 2550 |
| | 7 7/8 | 4 1/2 | 11.6 | I- 8 0 | 0 | 9395 |
| - | | | | | | |
| - | | | | | | |

TUBING RECORD

| SIZE (in) | WT (lb/ft) | GRADE | TOP (ft) | BTM (ft) |
|-----------|------------|-------|----------|----------|
| 2 3/8 | 4.7 | J-55 | 0 | 8212 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

PERFORATION RECORD

| ZONE | TOP (ft) | BTM (ft) | SPF | DATE SHOT | STATUS |
|------------|----------|----------|-----|-----------|--------|
| Wasatch | 6,234 | 6,237 | 4 | 12/14/06 | Open |
| Wasatch | 6,286 | 6,291 | 4 | 12/14/06 | Open |
| Wasatch | 6,650 | 6,652 | 4 | 12/14/06 | Open |
| Wasatch | 6,722 | 6,726 | 4 | 12/14/06 | Open |
| Wasatch | 7,066 | 7,070 | 4 | 12/14/06 | Open |
| Mesa Verde | 7,692 | 7,697 | 4 | 12/14/06 | Open |
| Mesa Verde | 7,966 | 7,969 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,028 | 8,032 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,052 | 8,055 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,295 | 8,300 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,404 | 8,406 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,539 | 8,543 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,608 | 8,612 | 4 | 12/13/06 | Ореп |
| Mesa Verde | 9,141 | 9,145 | 4 | 12/13/06 | Open |
| Mesa Verde | 9,156 | 9,160 | 4 | 12/13/06 | Open |

NBU 921-33J 2113' FSL & 1951' FEL NWSE - Section 33 – T9S – R21E Uintah County, UT

<u>CORRECTIVE ACTION PROCEDURE</u>: PERFORATION DEPTHS FROM CUTTERS GR-CBL-CCL, DATED 11 DECEMBER 2006.

- 1. MIRU. N/D WH & N/U BOPE. KILL WELL & POOH W/ TBG. RIH W/GAUGE RING TO 5150' MD. POOH W/WIRELINE.
- 2. PLUG #1, 4734-5104', EXISTING PERFORATIONS AND WASATCH TOP AND PRESSURE TEST WELLBORE: SET CIBP AT 5104' W/ 2-3/8" 4.7# J-55 TBG. & P/U TO 4734'. SPOT ~28 SX OF 15.8 PPG CLASS G CMNT. (1.15 CUFT/SX YLD.). PULL OUT OF CMNT. & CIRC. CLEAN. WOC. POOH W/TBG. FILL-UP WELLBORE AND PRESSURE TEST SAME TO 1000 PSI (90% OF SURF. PRESSURE MUST HOLD FOR 30 MIN).
- 3. TEST EXTERNAL MECHANICAL INTEGRITY (MIT) OF WELLBORE AND CONFINING INTERVALS: RIH W/3-3/8" EXPENDABLE (23 GM & 0.35" DIA. HOLE) GUN & PERFORATE THROUGH 4-1/2" & 9-5/8" CSG. AT 1942-1947' W/ 4 SPF (20 HOLES). RIH W/ 4-1/2" PKR. DRESSED FOR 2-3/8" 4.7# J-55 TBG. & SET SAME AT ~1800 MD. R/U TESTERS, LUBRICATOR AND WIRELINE TESTING TOOLS & RIH BELOW PKR. W/ RADIOACTIVE TRACER SURVEY DETECTION TOOLS.
- 4. R/U PUMPING SERVICES, BREAKDOWN PERFORATIONS AND EST. INJ. RATE. PUMP 400 BBLS OF RECYCLED WATER W/RADIOACTIVE TRACERS INTO PERFORATIONS AT 1942-1947' MD AS SPECIFIED BY TESTERS. **DO NOT EXCEED THE CALCULATED MAIP OF 563 PSI FOR THE TOP TEST PERFORATIONS** WHILE PUMPING FLUID. ADJUST PUMP RATE ACCORDINGLY TO REMAIN BELOW THE MAIP. POOH WITH WIRELINE TESTING TOOLS. UNSEAT PKR. AND POOH W/TBG.
- 5. **EVALUATE RESULTS OF EXTERNAL MECHANICAL INTEGRITY:** FOR EXTERNAL CSG. AND CMNT. INTEGRITY TO BE ADEQUATE FOR SWD CONVERSION, RADIOACTIVE ISOTOPES SHOULD NOT BE DETECTED OUTSIDE THE 1664-1957' PROPOSED INJ. INTERVAL. IF MIT IS SUCCESSFUL, RIH W/ 2-3/8" 4.7# J-55 TBG. & LAND SAME AT ~1500'. IF MIT FAILS, SQUEEZE CMNT. AS APPROPRIATE AND RETEST. N/D BOPE AND N/U WH. RDMO.

EPA PERMIT #:

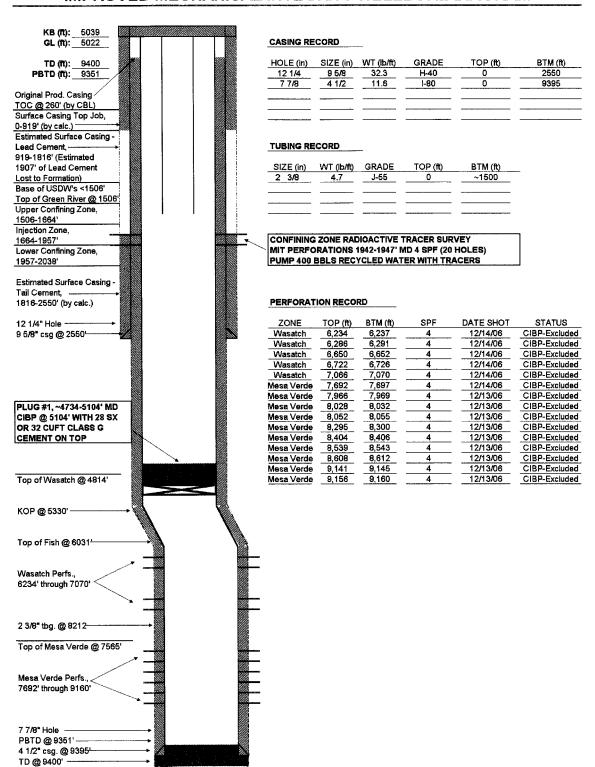
WELL: NBU 921-33J FIELD: NATURAL BUTTES API# 43-047-36394 LEASE #: STUO-015630-ST

CNTY: UINTAH STATE: UTAH

FT.: 2113' FSL & 1951' FEL

Q-Q: NWSE SEC .: 33 TWS: 98 RGE: 21E

IMPROVED MECHANICAL INTEGRITY WELLBORE DIAGRAM



| STATE OF UTAH | | | FORM 9 | | |
|---|---|--|---|--|--|
| | DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MI | | 5.LEASE DESIGNATION AND SERIAL NUMBER: STUO-015630-ST | | |
| | RY NOTICES AND REPORTS | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | |
| | sals to drill new wells, significantly deepe igged wells, or to drill horizontal laterals. | | 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES | | |
| 1. TYPE OF WELL Gas Well | 8. WELL NAME and NUMBER: NBU 921-33J | | | | |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS | HORE, L.P. | | 9. API NUMBER: 43047363940000 | | |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S | treet, Suite 600, Denver, CO, 80217 377 | PHONE NUMBER: 9 720 929-6007 Ext | 9. FIELD and POOL or WILDCAT: NATURAL BUTTES | | |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 2113 FSL 1951 FEL | | | COUNTY: UINTAH | | |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 33 Township: 09.0S Range: 21.0E Meridian: S | | | STATE: UTAH | | |
| 11. CHE | CK APPROPRIATE BOXES TO INDICA | TE NATURE OF NOTICE, REPORT, | OR OTHER DATA | | |
| TYPE OF SUBMISSION | | TYPE OF ACTION | | | |
| | ☐ ACIDIZE | ☐ ALTER CASING | CASING REPAIR | | |
| NOTICE OF INTENT Approximate date work will start: 3/5/2010 | CHANGE TO PREVIOUS PLANS | CHANGE TUBING | CHANGE WELL NAME | | |
| 3/3/2010 | CHANGE WELL STATUS | ☐ COMMINGLE PRODUCING FORMATIONS | ✓ CONVERT WELL TYPE | | |
| SUBSEQUENT REPORT Date of Work Completion: | DEEPEN | FRACTURE TREAT | NEW CONSTRUCTION | | |
| Date of Work Completion: | OPERATOR CHANGE | PLUG AND ABANDON | ☐ PLUG BACK | | |
| | ☐ PRODUCTION START OR RESUME | RECLAMATION OF WELL SITE | RECOMPLETE DIFFERENT FORMATION | | |
| SPUD REPORT Date of Spud: | ☐ REPERFORATE CURRENT FORMATION | SIDETRACK TO REPAIR WELL | ☐ TEMPORARY ABANDON | | |
| | ☐ TUBING REPAIR | ☐ VENT OR FLARE | ☐ WATER DISPOSAL | | |
| ☐ DRILLING REPORT | ☐ WATER SHUTOFF | SI TA STATUS EXTENSION | APD EXTENSION | | |
| Report Date: | ☐ WILDCAT WELL DETERMINATION | OTHER | OTHER: | | |
| THE OPERATOR REQ | OMPLETED OPERATIONS. Clearly show all per UESTS AUTHORIZATION TO SEE ATTACHED PROCEDURE | CONVERT THIS WELL TO A FOR OPERATION DETAILS I Oi | | | |
| NAME (PLEASE PRINT) Andy Lytle | PHONE NUMBE 720 929-6100 | R TITLE Regulatory Analyst | | | |
| SIGNATURE N/A | | DATE 3/2/2010 | | | |

NBU 921-33J 2113' FSL & 1951' FEL NWSE SEC. 33 - T9S - 21E **Uintah County, UT**

KBE: 5039' GLE: 5022' TD: 9400' PBTD: 9351' API NUMBER: 43-047-36394 **LEASE NUMBER:** WI: 100%

STUO-015630-ST

NRI: ORRI: 80.702950% 9.547750%

CASING:

12.25" hole

9.625" 32.3# H-40 @ 2550'

Cemented with 230 sx (878 cuft) HiFill lead, 200 sx (230 cuft) Class G tail. Pumped top jobs using 250 sx (288 cuft) Class G in two stages. Hole stayed full,

TOC @ surface.

7.875" hole

Original wellbore, 2550-9700', TOF @ 6031' - see 11/21/2006 sundry notice for description of fish. Cement plug from 6031' to KOP @ 5330'.

Sidetrack wellbore, 5330' to 9400'.

4.5" 11.6# I-80 @ 9395'

Cemented with 535 sx (1348 cuft) Premium Lite II lead and 1475 sx (1932 cuft)

50-50 pozmix tail. TOC @ 260' by CBL.

TUBING: 2.375" 4.7# J-55 tubing at 8212'

| Tubular/Borehole | Drift | Collapse | Burst | Capacities | | |
|-------------------------------|------------|----------|-------|------------|----------|----------|
| | inches | psi | Psi | Gal./ft. | Cuft/ft. | Bbl./ft. |
| 2.375" 4.7# J-55 tbg. | 1.901 | 8100 | 7700 | 0.1626 | 0.02173 | 0.00387 |
| 4.5" 11.6# N/M/I-80 csg | 3.875 | 6350 | 7780 | 0.6528 | 0.0872 | 0.01554 |
| 9.625" 32.3# H-40 csg | 8.845 | 1400 | 2270 | 3.3055 | 0.4418 | 0.0787 |
| Annular Capacities | | | | • | | |
| 2.375" tbg. X 4.5" 11.6# csg | <u></u> Ţ. | | | 0.4226 | 0.0565 | 0.01006 |
| 4.5" csg. X 9.625" 32.3# csg. | | | | 2.4780 | 0.3314 | 0.0590 |
| 4.5" csg. X 7.875" hole | | | | 1.7052 | 0.2278 | 0.0406 |
| 9.625" csg. X 12.25" hole | | | | 2.3436 | 0.3132 | 0.0558 |

GEOLOGIC INFORMATION:

| Formation | Depth to top, ft. |
|-------------|-------------------|
| Uinta | Surface |
| Green River | 1506' |
| Wasatch | 4814' |
| Mesa Verde | 7565' |

Tech. Pub. #92 Base of USDW's

USDW Elevation ~1500' MSL USDW Depth ~3522' GLE

The estimated USDW depth from Technical Publication #92 is inconsistent with Birds Nest water samples from numerous wells in the vicinity.

WELL LOGS:

- Halliburton GR-SP-IEL (2535-9374') and GR-CNL-FDC (2535-9347'), dated 11/24/2006.
- Cutters Wireline Service GR-CBL-CCL (30-9236'), dated 12/11/2006.

Geologic markers were correlated from the gamma ray. There is no CBL for the surface casing and the bond index across the intervals of interest for the production casing will not calculate an 80% bond index or greater based on EPA guidance.

PERFORATIONS:

| Formation | Date | Тор | Bottom | SPF | STATUS |
|------------|------------|------|--------|-----|--------|
| | | | | | |
| Wasatch | 12/14/2006 | 6234 | 6237 | 4 | Open |
| Wasatch | 12/14/2006 | 6286 | 6291 | 4 | Open |
| Wasatch | 12/14/2006 | 6650 | 6652 | 4 | Open |
| Wasatch | 12/14/2006 | 6722 | 6726 | 4 | Open |
| Wasatch | 12/14/2006 | 7066 | 7070 | 4 | Open |
| Mesa Verde | 12/14/2006 | 7692 | 7697 | 4 | Open |
| Mesa Verde | 12/13/2006 | 7966 | 7969 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8028 | 8032 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8052 | 8055 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8295 | 8300 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8404 | 8406 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8539 | 8543 | 4 | Open |
| Mesa Verde | 12/13/2006 | 8608 | 8612 | 4 | Open |
| Mesa Verde | 12/13/2006 | 9141 | 9145 | 4 | Open |
| Mesa Verde | 12/13/2006 | 9156 | 9160 | 4 | Open |

RECEIVED March 02, 2010

WELL HISTORY:

Completion – December 2006

- Perforated the gross Mesa Verde interval 9141' through 9160' and fractured with 2009 bbl gel containing 233825# 20/40 sand.
- Perforated the gross Mesa Verde interval 8404' through 8612' and fractured with 1050 bbl gel containing 130659# 20/40 sand.
- Perforated the Mesa Verde interval 8295-8300' and fractured with 437 bbl gel containing 39350# 20/40 sand.
- Perforated the gross Mesa Verde interval 7966' through 8055' and fractured with 3122 bbl gel containing 333450# 20/40 sand.
- Perforated the Mesa Verde interval 7692-7697' and fractured with 403 bbl gel containing 39740# 20/40 sand.
- Perforated the gross Wasatch interval 6650' through 7070' and fractured with 820 bbl gel containing 99506# 20/40 sand.
- Perforated the gross Wasatch interval 6234' through 6291' and fractured with 575 bbl gel containing 88543# 20/40 sand.
- Drilled out to PBTD' and landed tubing at 8212'.
- Tested 1071 MCFD, 0 BOPD, 750 BWPD, 578 psi FTP, 1455 psi SICP, 22/64th choke on 1/3/2007.

EPA PERMIT #:

WELL: NBU 921-33J
FIELD: NATURAL BUTTES
API # 43-047-36394
LEASE #: STUO-015630-ST

CNTY: UINTAH STATE: UTAH FT.:

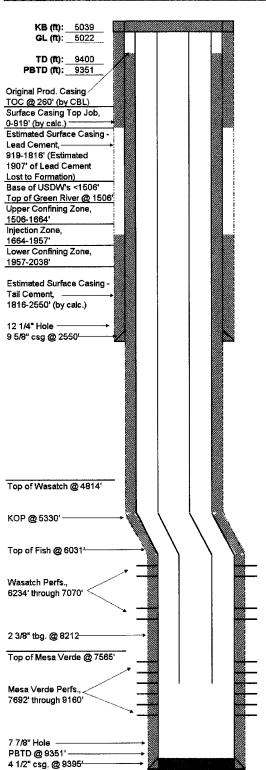
RGE:

2113' FSL & 1951' FEL

Q-Q: NWSE SEC.: 33 TWS: 98

21E

CURRENT WELLBORE DIAGRAM



TD @ 9400'

CASING RECORD

| | HOLE (in) | SIZE (in) | WT (lb/ft) | GRADE | TOP (ft) | BTM (ft) |
|---|-----------|-----------|------------|---------------|----------|----------|
| | 12 1/4 | 9 5/8 | 32.3 | H-40 | 0 | 2550 |
| | 7 7/8 | 4 1/2 | 11.6 | I- 8 0 | 0 | 9395 |
| - | | | | | | |
| - | | | | | | |

TUBING RECORD

| SIZE (in) | WT (lb/ft) | GRADE | TOP (ft) | BTM (ft) |
|-----------|------------|-------|----------|----------|
| 2 3/8 | 4.7 | J-55 | 0 | 8212 |
| | | | | |
| | | | | |
| | | | | - |
| | | | | |

PERFORATION RECORD

| ZONE | TOP (ft) | BTM (ft) | SPF | DATE SHOT | STATUS |
|------------|----------|----------|-----|-----------|--------|
| Wasatch | 6,234 | 6,237 | 4 | 12/14/06 | Open |
| Wasatch | 6,286 | 6,291 | 4 | 12/14/06 | Open |
| Wasatch | 6,650 | 6,652 | 4 | 12/14/06 | Open |
| Wasatch | 6,722 | 6,726 | 4 | 12/14/06 | Open |
| Wasatch | 7,066 | 7,070 | 4 | 12/14/06 | Open |
| Mesa Verde | 7,692 | 7,697 | 4 | 12/14/06 | Open |
| Mesa Verde | 7,966 | 7,969 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,028 | 8,032 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,052 | 8,055 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,295 | 8,300 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,404 | 8,406 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,539 | 8,543 | 4 | 12/13/06 | Open |
| Mesa Verde | 8,608 | 8,612 | 4 | 12/13/06 | Ореп |
| Mesa Verde | 9,141 | 9,145 | 4 | 12/13/06 | Open |
| Mesa Verde | 9,156 | 9,160 | 4 | 12/13/06 | Open |

NBU 921-33J 2113' FSL & 1951' FEL NWSE - Section 33 – T9S – R21E Uintah County, UT

<u>CORRECTIVE ACTION PROCEDURE</u>: PERFORATION DEPTHS FROM CUTTERS GR-CBL-CCL, DATED 11 DECEMBER 2006.

- 1. MIRU. N/D WH & N/U BOPE. KILL WELL & POOH W/ TBG. RIH W/GAUGE RING TO 5150' MD. POOH W/WIRELINE.
- 2. PLUG #1, 4734-5104', EXISTING PERFORATIONS AND WASATCH TOP AND PRESSURE TEST WELLBORE: SET CIBP AT 5104' W/ 2-3/8" 4.7# J-55 TBG. & P/U TO 4734'. SPOT ~28 SX OF 15.8 PPG CLASS G CMNT. (1.15 CUFT/SX YLD.). PULL OUT OF CMNT. & CIRC. CLEAN. WOC. POOH W/TBG. FILL-UP WELLBORE AND PRESSURE TEST SAME TO 1000 PSI (90% OF SURF. PRESSURE MUST HOLD FOR 30 MIN).
- 3. TEST EXTERNAL MECHANICAL INTEGRITY (MIT) OF WELLBORE AND CONFINING INTERVALS: RIH W/3-3/8" EXPENDABLE (23 GM & 0.35" DIA. HOLE) GUN & PERFORATE THROUGH 4-1/2" & 9-5/8" CSG. AT 1942-1947' W/ 4 SPF (20 HOLES). RIH W/ 4-1/2" PKR. DRESSED FOR 2-3/8" 4.7# J-55 TBG. & SET SAME AT ~1800 MD. R/U TESTERS, LUBRICATOR AND WIRELINE TESTING TOOLS & RIH BELOW PKR. W/ RADIOACTIVE TRACER SURVEY DETECTION TOOLS.
- 4. R/U PUMPING SERVICES, BREAKDOWN PERFORATIONS AND EST. INJ. RATE. PUMP 400 BBLS OF RECYCLED WATER W/RADIOACTIVE TRACERS INTO PERFORATIONS AT 1942-1947' MD AS SPECIFIED BY TESTERS. **DO NOT EXCEED THE CALCULATED MAIP OF 563 PSI FOR THE TOP TEST PERFORATIONS** WHILE PUMPING FLUID. ADJUST PUMP RATE ACCORDINGLY TO REMAIN BELOW THE MAIP. POOH WITH WIRELINE TESTING TOOLS. UNSEAT PKR. AND POOH W/TBG.
- 5. **EVALUATE RESULTS OF EXTERNAL MECHANICAL INTEGRITY:** FOR EXTERNAL CSG. AND CMNT. INTEGRITY TO BE ADEQUATE FOR SWD CONVERSION, RADIOACTIVE ISOTOPES SHOULD NOT BE DETECTED OUTSIDE THE 1664-1957' PROPOSED INJ. INTERVAL. IF MIT IS SUCCESSFUL, RIH W/ 2-3/8" 4.7# J-55 TBG. & LAND SAME AT ~1500'. IF MIT FAILS, SQUEEZE CMNT. AS APPROPRIATE AND RETEST. N/D BOPE AND N/U WH. RDMO.

EPA PERMIT #:

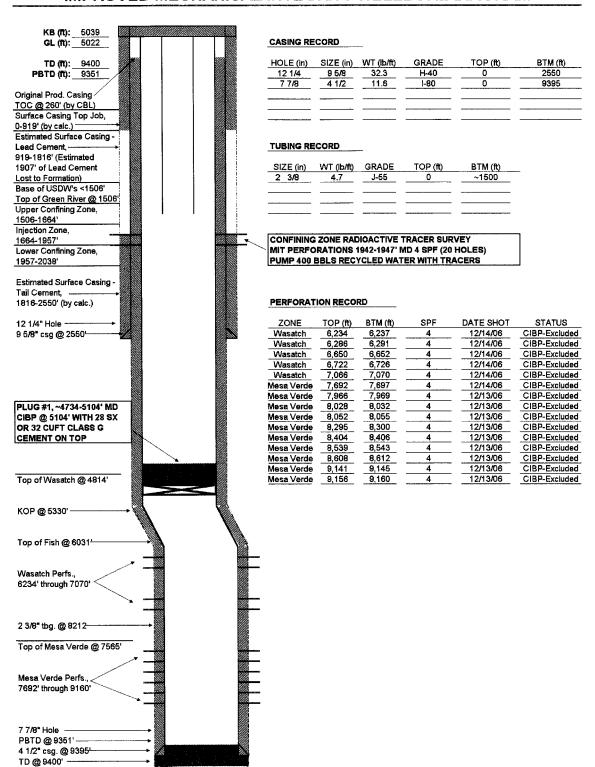
WELL: NBU 921-33J FIELD: NATURAL BUTTES API# 43-047-36394 LEASE #: STUO-015630-ST

CNTY: UINTAH STATE: UTAH

FT.: 2113' FSL & 1951' FEL

Q-Q: NWSE SEC .: 33 TWS: 98 RGE: 21E

IMPROVED MECHANICAL INTEGRITY WELLBORE DIAGRAM





State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA

Division Director

April 14, 2011

CERTIFIED MAIL NO.: 7005 1820 0001 5562 9054

Ms. Julie Jacobson Kerr McGee Oil and Gas 1099 18th St, Ste 1800 Denver CO 80202

UTAH

OIL, GAS & MINING

Subject: **SECOND NOTICE:** Extended Shut-in and Temporarily Abandoned Well Requirements

for Wells on Fee or State Leases

Dear Ms. Jacobson:

As of January 2011, Kerr McGee Oil and Gas (Kerr McGee) has one (1) Fee Lease Well and sixteen (16) State Lease Wells (see Attachment A) that are in non-compliance with the requirements for extended shut-in or temporarily abandoned (SI/TA) status. Wells SI/TA beyond twelve (12) consecutive months requires the filing of a Sundry Notice in accordance with R649-3-36-1 for Utah Division of Oil, Gas & Mining (Division) approval. Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (R649-3-36-1.3.3).

This is the **SECOND NOTICE** of non-compliance that Kerr McGee has received for wells listed as such on Attachment A. In March and April 2009 via certified mail the first notices were sent requesting required information to bring wells into compliance. Kerr McGee sent response dated April 7, 2009, which listed future plans for the wells. The Division sent Kerr McGee a "request denied" (in regard to SI/TA extension status) dated April 28, 2009. This denial was sent due to lack of addressing the requirements per Rule R649-3-36. Second notices were sent via certified mail in July 2009. Additional correspondence from Kerr McGee was received and four (4) of the aforementioned wells (Attachment A) had been granted SI/TA extensions which have since expired. To date the Division has not received additional information nor seen any progress being made to move the wells out of non-compliance status.

This is also a reissuance of a FIRST NOTICE for wells listed as such on Attachment A as they previously had notices sent on October 1, 2008. It is also a First Notice for wells that have recently been added to Kerr McGee's non compliance list. Please submit the required information for extended SI/TA status within 30 days of this notice or further actions will be initiated.

Page 2 Kerr McGee Oil and Gas April 14, 2011

For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas & Mining with the following:

- 1. Reasons for SI/TA of the well (R649-3-36-1.1).
- 2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
- 3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

Please note that the Divisions preferred method for showing well integrity is by MIT

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).

- 1. Wellbore diagram, and
- 2. Copy of recent casing pressure test, and
- 3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
- 4. Fluid level in the wellbore, and
- 5. An explanation of how the submitted information proves integrity.

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Sincerely,

Dustin K. Doucet Petroleum Engineer

DKD/JP/js Enclosure

cc: Compliance File

Well File

LaVonne Garrison, SITLA

ATTACHMENT A

| Well Name | Well Name API LEASE | | Years Inactive | SI/TA Extension Expired On | | | | | |
|---------------------------------|---------------------|-----------------------------|-------------------|-------------------------------|--|--|--|--|--|
| Reissued 2 ND NOTICE | | | | | | | | | |
| 1 LOVE 1121-16F | 43-047-36253 | ML-46532 | 3 Years 2 Months | | | | | | |
| 2 NBU 1021-1G | 43-047-39001 | ML-23612 | 3 Years 2 Months | 12/31/2010 | | | | | |
| 3 NBU 1022-13I4S | 43-047-39475 | STUO-08512-ST | 3 Years 2 Months | 12/13/2010 | | | | | |
| 4 NBU 3-2B | 43-047-30267 | ML-22651 | 3 Years 5 Months | | | | | | |
| | Reiss | sued 1 ST NOTICE | | | | | | | |
| 5 BONANZA 1023-16J | 43-047-37092 | ML-22186-A | 3 Years 10 Months | 12/31/2010 | | | | | |
| 6 NBU 921-34J | 43-047-37953 | STATE | 3 Years 6 Months | 9/01/2009 | | | | | |
| 1 ST NOTICE | | | | | | | | | |
| 7 HALL ET AL 31 18 | 43-047-30664 | FEE | 2 Years 5 Months | | | | | | |
| 8 STATE 921-27L | 43-047-32466 | U-01194AST | 2 Years 2 Months | | | | | | |
| 9 NBU 1022-16O | 43-047-35945 | ML-3276 | 2 Years 2 Months | | | | | | |
| 10 NBU 1022-16E | 43-047-35949 | ML-3276 | 1 Year 1 Month | | | | | | |
| 11 LOOKOUT POINT STATE 1-16 | 43-047-30544 | ML-22186-A | 1 Year 9 Months | | | | | | |
| 12 CIGE 79D | 43-047-30896 | ML-23612 | 1 Year 1 Month | | | | | | |
| 13 CIGE 240 | 43-047-33207 | ML-22935 | 1 Year 9 Months | | | | | | |
| 14 OURAY 32-146 | 43-047-33623 | ML-22052 | 1 Year 9 Months | | | | | | |
| 15 NBU 921-34L | 43-047-36388 | STUO-1194-AST | 1 Year 9 Months | | | | | | |
| 16 NBU 921-33J | 43-047-36394 | STUO-015630-ST | 1 Year 11 Months | | | | | | |
| 17 NBU 438-19E | 43-047-37534 | ML-22792 | 1 Year | | | | | | |



| | STATE OF UTAH | | FORM 9 | | | | | |
|--|---|---|---|--|--|--|--|--|
| | DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN | | 5.LEASE DESIGNATION AND SERIAL NUMBER: STUO-015630-ST | | | | | |
| SUNDF | RY NOTICES AND REPORTS | ON WELLS | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | | | | |
| Do not use this form for proposition-hole depth, reenter plu DRILL form for such proposals. | existing wells below current Jse APPLICATION FOR PERMIT TO | 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES | | | | | | |
| 1. TYPE OF WELL Gas Well | | | | | | | | |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS | HORE, L.P. | | 9. API NUMBER: 43047363940000 | | | | | |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S | PHO treet, Suite 600, Denver, CO, 80217 3779 | NE NUMBER: 720 929-6515 Ext | 9. FIELD and POOL or WILDCAT: NATURAL BUTTES | | | | | |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 2113 FSL 1951 FEL | | | COUNTY: UINTAH | | | | | |
| QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NWSE Section: 33 | IP, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian: | S | STATE: UTAH | | | | | |
| 11. CHE | CK APPROPRIATE BOXES TO INDICAT | TE NATURE OF NOTICE, REPORT, | OR OTHER DATA | | | | | |
| TYPE OF SUBMISSION | | TYPE OF ACTION | | | | | | |
| | ☐ ACIDIZE | ☐ ALTER CASING | CASING REPAIR | | | | | |
| NOTICE OF INTENT Approximate date work will start: | ☐ CHANGE TO PREVIOUS PLANS | ☐ CHANGE TUBING | ☐ CHANGE WELL NAME | | | | | |
| 6/2/2011 | ☐ CHANGE WELL STATUS | ☐ COMMINGLE PRODUCING FORMATIONS | CONVERT WELL TYPE | | | | | |
| SUBSEQUENT REPORT | DEEPEN | FRACTURE TREAT | ☐ NEW CONSTRUCTION | | | | | |
| Date of Work Completion: | OPERATOR CHANGE | PLUG AND ABANDON | ☐ PLUG BACK | | | | | |
| | PRODUCTION START OR RESUME | RECLAMATION OF WELL SITE | ✓ RECOMPLETE DIFFERENT FORMATION | | | | | |
| SPUD REPORT Date of Spud: | REPERFORATE CURRENT FORMATION | ☐ SIDETRACK TO REPAIR WELL | TEMPORARY ABANDON | | | | | |
| | ☐ TUBING REPAIR | ☐ VENT OR FLARE | ☐ WATER DISPOSAL | | | | | |
| Drilling REPORT | ☐ WATER SHUTOFF | SI TA STATUS EXTENSION | APD EXTENSION | | | | | |
| Report Date: | ☐ WILDCAT WELL DETERMINATION | OTHER | OTHER: | | | | | |
| 12 DESCRIBE PROPOSED OF CO | MMDI FTFD ODFDATIONS Clearly show all no | tinent details including dates, denths, y | volumes etc | | | | | |
| The operator will roperator is requestir | 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. The operator will no longer be making this well location a SWD well. The operator is requesting to abandon the Wasatch & Mesaverde formations and then recomplete & produce the Green River formation. Please see attached procedures for recompletion details. Approved by the Utah Division of Oil, Gas and Mining | | | | | | | |
| Date: 06/21/2011 By: | | | | | | | | |
| | | | | | | | | |
| NAME (PLEASE PRINT) Gina Becker | PHONE NUMBER 720 929-6086 | TITLE Regulatory Analyst II | | | | | | |
| SIGNATURE N/A | | DATE 6/2/2011 | | | | | | |



Kerr-McGee Oil & Gas Onshore LP PO Box 173779 DENVER, CO 80217-3779

June 7, 2011

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Exception location to Spacing Order 197-1

NBU 921-33J T9S-R21E

Sec 33: 2113' FSL, 1951' FEL (NW/4SE/4)

Uintah County, Utah

Dear Ms. Mason:

Kerr-McGee Oil & Gas Onshore LP proposes to recomplete the captioned well (that was producing out of the unitized Wasatch-Mesaverde formations) to the Green River formation which is not unitized. The unitized interval is depleted and will be sealed off during this operation. We request an exception location to Spacing Order 197-1, which establishes 160 acre quarter section spacing, with the well being a minimum of 1000' from the boundary of the spacing unit. We request the exception due to the fact that this is an existing well that has already been drilled at the above captioned location. Recompleting the well to the Green River formation is economically feasible and could continue this well bore as a producing well.

Kerr-McGee is the operator and owner of 100% of the operating rights in the Green River formation in the N/2 and SW/4 of Section 33-T9S-R21E which are the offset quarter sections being infringed upon. Kerr-McGee does not object to the exception location requested herein.

We request the exception location at your earliest convenience.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Joe Matney Sr. Staff Landman 720-929-6147

Greater Natural Buttes Unit



NBU 921-33J

RE-COMPLETIONS PROCEDURE

DATE:5/24/2011

AFE#:

API#:4304736394

USER ID:OOT937 (Frac Invoices Only)

COMPLETIONS ENGINEER: Zachary Garrity, Denver, CO

(720) 929-6180 (Office) (720) 781-6427 (Cell)

SIGNATURE:

ENGINEERING MANAGER: JEFF DUFRESNE

SIGNATURE:

REMEMBER SAFETY FIRST!

Name: NBU 921-33J

Location: NW SE Sec 33 T9S R21E

Uintah County, UT

Date: 5/24/2011

ELEVATIONS: 5022' GL 5039' KB Frac Registry TVD: 9395

TOTAL DEPTH: 9416' **PBTD:** 9349'

SURFACE CASING: 9 5/8", 32.3# H-40 LT&C @ 2091'

9 5/8", 36# J-55 LT&C @ 2091-2549"

PRODUCTION CASING: 4 1/2", 11.6#, I-80 LT&C @ 9395'

Marker Joint 4494-4513'

TUBULAR PROPERTIES:

| | BURST | COLLAPSE | DRIFT DIA. | CAPACITIES | |
|------------------|-------|----------|------------|------------|----------|
| | (psi) | (psi) | (in.) | (bbl/ft) | (gal/ft) |
| 2 3/8" 4.7# J-55 | 7,700 | 8,100 | 1.901" | 0.00387 | 0.1624 |
| tbg | | | | | |
| 4 ½" 11.6# I-80 | 7780 | 6350 | 3.875" | 0.0155 | 0.6528 |
| (See above) | | | | | |
| 2 3/8" by 4 ½" | | | | 0.0101 | 0.4227 |
| Annulus | | | | | |

| TOPS: BOTTOMS: |
|----------------|
|----------------|

1,505' Green River Top*

1,664' Birds Nest Top*

2,174' Mahogany Top*

4,813' Wasatch Top* 7,765' Wasatch Bottom*

7,765' Mesaverde Top* 9416' Mesaverde Bottom (TD)

T.O.C. @ 2210' (Cutters – 12/11/2006)

GENERAL:

- A minimum of 7 tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Halliburtons Induction-Density-Neutron log dated 11/24/2006.
- 2 fracturing stages required for coverage.
- Procedure calls for 2 CBP's (8000 psi) and 3 CIBP.
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Pump scale inhibitor at 3 gpt (in pad and until 1.25 ppg ramp up is reached) and 10 gpt in all flushes except the final stage. Remember to pre-load the casing with scale inhibitor for the very first stage with 10 gpt.
- 30/50 mesh Ottawa sand, **Slickwater frac**.
- Maximum surface pressure **6200** psi.

^{*} These formations tops and bottoms are based off the most recent geological interpretation and may not match past formation tops and bottoms.

- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). Stage acid and scale inhibitor if necessary to cover the next perforated interval.
- Call flush at 0 PPG @ inline densiometers. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.
- If distance between plug and top perf of previous stage is less than 50', it is considered to be tight spacing over flush stage by 5 bbls (from top perf)
- Service companies need to provide surface/production annulus pop-offs to be set for 500 psi for each frac.
- Pump 20/40 mesh **curable resin coated sand** last 5,000# of all frac stages
- Tubing Currently Landed @~5810
- Originally completed on 12/12/2006
- Cement quanties below assume neat Class G, yield 1.145 CUFT./SX. If a different product is used, wellsite personnel are responsible for correcting quantities to yield the stated slurry volume when squeezing, include 10% excess per 1000' of depth.

Existing Perforations:

| PERFORATIONS | | | | | | | | | |
|--------------|------|------|------|-----|-------|------------|------------|--------------------|-----------|
| Formation | Zone | Top | Btm | spf | Shots | Date | Reason | Comments | Producing |
| WASATCH | | 5853 | 5863 | 4 | 40 | 10/15/2008 | PRODUCTION | | Yes |
| WASATCH | | 6036 | 6040 | 4 | 16 | 10/15/2008 | PRODUCTION | | Yes |
| WASATCH | | 6174 | 6180 | 4 | 24 | 10/15/2008 | PRODUCTION | | Yes |
| WASATCH | | 6234 | 6237 | 4 | 12 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| WASATCH | | 6286 | 6291 | 4 | 20 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| WASATCH | | 6650 | 6652 | 4 | 8 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| WASATCH | | 6722 | 6726 | 4 | 16 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| WASATCH | | 7066 | 7070 | 4 | 16 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| WASATCH | | 7692 | 7697 | 4 | 20 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| MESA VERDE | | 7966 | 7969 | 4 | 12 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| MESA VERDE | | 8028 | 8032 | 4 | 16 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| MESA VERDE | | 8052 | 8055 | 4 | 12 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| MESA VERDE | | 8295 | 8300 | 4 | 20 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| MESA VERDE | | 8404 | 8406 | 4 | 8 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| MESA VERDE | | 8539 | 8543 | 4 | 16 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| MESA VERDE | | 8608 | 8612 | 4 | 16 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| MESA VERDE | | 9141 | 9145 | 4 | 16 | 12/13/2006 | | Fluid: Fresh Water | Yes |
| MESA VERDE | | 9156 | 9160 | 4 | 16 | 12/13/2006 | | Fluid: Fresh Water | Yes |

Relevant History:

12/12/2006 – Original Completions

2/29/2008 – Slickline. Rig up, master valve, ball valves, and flow line were frozen. Couldn't unfreeze, rig down.

10/13/2008 – Recomplete upper Wasatch. Land tbg at 5810'.

H2S History:

N/A due to extended shut in period

<u>PROCEDURE</u>: (If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work.)

- 1. MIRU. Control well with recycled water and biocide as required. ND WH, and NU BOP's.
- 2. TOOH with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~5810'). Visually inspect for scale and consider replacing if needed, RIH with tubing and tag for fill before TOOH.
- 3. If the looks ok consider running a gauge ring to 7,966' (50' below proposed CIBP). Otherwise P/U a mill and C/O to 7,966' (50' below proposed CIBP).

4. Abandon Mesaverde Perfs:

RIH and set CIBP at \sim 7,916' to isolate Mesaverde perfs. Release CIBP, Pull up hole 10', break circulation with fresh water. Displace a minimum of 100' cement (8 SX / 1.6 BBL / 8.72 CUFT) from top of plug to 7,816'. Pull up hole above TOC and reverse circulate with treated brine. POOH standing back tubing.

5. Abandon Wasatch Perfs:

RIH and set CIBP at \sim 5,803' to isolate Wasatch perfs. Release CIBP, Pull up hole 10', break circulation with fresh water. Displace a minimum of 100' cement (8 SX / 1.6 BBL / 8.72 CUFT) from top of plug to 5,703'. Pull up hole above TOC and reverse circulate with treated brine. POOH laying down tubing.

- 6. PU and set a **CIBP** at ~ 4597'. ND BOPs and NU frac valves. Test frac valves and casing to 1000 and 3500 psi for 15 minutes each and to 6200 psi for 30 minutes. As per standard operating procedure install steel blowdown line to reserve pit from 4-1/2" X 8-5/8" annulus with pressure relief valve in line. Pressure relief will be set to release at 500 psig. Lock **OPEN** the Braden head valve. Annulus will be monitored throughout stimulation. If release occurs, stimulation will be shut down. Well conditions will be assessed and actions taken as necessary to secure the well. UDOGM will be notified if a release to the annulus occurs.
- 7. Perf the following with 3-3/8" gun, 23 gm, 0.36"hole:

| Zone | From | To | spf | # of shots |
|-------------|------|------|-----|------------|
| Green River | 4451 | 4455 | 4 | 16 |
| Green River | 4495 | 4497 | 4 | 8 |

- 8. Breakdown perfs and establish injection rate (<u>include scale inhibitor in fluid</u>). Spot 250 gals of 15% HCL and let soak 5-10 min. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~4451' and trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 9. Set 8000 psi **CBP** at ~4,184'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

| Zone | From | To | spf | # of shots |
|-------------|------|------|-----|------------|
| Green River | 4024 | 4027 | 3 | 9 |
| Green River | 4063 | 4065 | 4 | 8 |
| Green River | 4132 | 4134 | 4 | 8 |

- 10. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~4024' and flush only with recycled water.
- 11. Set 8000 psi **CBP** at~3,974'.
- 12. ND Frac Valves, NU and Test BOPs.

- 13. TIH with 3 7/8" bit, pump off sub, SN and tubing.
- 14. Drill out the 2 CBP plugs and clean out 30' below bottom perf @ 4527'. Shear off bit and land tubing at \pm 4293' unless indicated otherwise by the well's behavior.
- 15. Clean out well with foam and/or swabbing unit until steady flow has been established from completion, if necessary
- 16. Leave surface casing valve open. Monitor and report any flow from surface casing. RDMO

For design questions, please call Zachary Garrity, Denver, CO (720) 929-6180 (Office) (406) 781-6427 (Cell)

For field implementation questions, please call Jeff Samuels, Vernal, UT (435) 781-7046 (Office)

NOTES:

If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work

Verify that the Braden head valve is locked OPEN.

Cement quanties below assume neat Class G, yield 1.145 CUFT/SX. If a different product is used, wellsite personnel are responsible for correcting quantities to yield the stated slurry volume when squeezing, include 10% excess per 1000' of depth.

Acid Pickling and H2S Procedures (If Required)

**PROCEDURE FOR PUMPING ACID DOWN TBG

WHEN FINDING SCALE IN TUBING THAT IS ACID SOLUBLE, ENSURE THAT PLUNGER EQUIPMENT IS REMOVED AND ABLE TO PUMP DOWN TBG. INSTALL A 'T' IN PUMP LINE W/2" VALVE THAT NALCO CAN TIE INTO. HAVE 60 BBLS 2% KCL MIXED W/ 10-15 GAL H2S SCAVENGER IN RIG FLAT TANK. (WE USED THE RIG FLAT TANK FOR MIXING CHEMICAL SO WE DIDN'T HAVE THE CHEMICAL IN ALL FLUIDS ON LOCATION, ONLY WHAT WE NEEDED TO PUMP DOWN HOLE)

- 1. PUMP 5-10 BBLS 2% KCL DOWN TBG (NALCO CANNOT PUMP AGAINST PRESSURE)
- 2. NALCO WILL PUMP 3 DRUMS HCL (31%) INTO PUMP LINE.
- 3. FLUSH BEHIND ACID WITH 10-15 BBL 2% KCL
- 4. PUMP 2—30 BBL 2% W/ H2S SCAVENGER DOWN TBG.
- 5. PUMP REMAINDER OF 2% W/ H2S SCAVENGER DOWN CASING AND SHUT WELL IN FOR MINIMUM OF 2 HRS.
- 6. OVER DISPLACE DOWN TBG AND CSG TO FLUSH ACID AND SCAVENGER INTO FORMATION
- 7. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

** PROCEDURE FOR PUMPING H2S SCAVENGER WITHOUT ACID

PRIOR TO RIG MOVING ON OR AS RIG PULLS ONTO LOCATION. TEST CASING, TUBING AND SEPARATOR FOR H2S. IF FOUND MAKE SURE THAT PLUNGER SYSTEM IS REMOVED (IT IS POSSIBLE TO PUMP AROUND PLUNGERS BUT SOME WILL HAVE A STANDING VALVE IN SEATING NIPPLE).

- 1. MIX 10-15 GAL H2S SCAVENGER WITH 60-100 BBL 2% KCL IN RIG FLAT TANK.
- 2. PUMP 25 BBLS MIXTURE DOWN TUBING AND REST DOWN CASING. SHUT WELL IN FOR 2 HOURS.
- 3. IF WELL HAS PRESSURE AFTER 2 HOURS RETEST CASING AND TUBING FOR H2S.
- 4. FLUSH TUBING AND CASING PUSHING H2S SCAVENGER INTO FORMATION.
- 5. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

^{**} As per APC standard operating procedure, APC foreman will verify ALL volumes pumped and record on APC Volume Report Form

Key Contact information

Completion Engineer

Zachary Garrity: 406-781-6427, 720-929-6180

Production Engineer

Jordan Portillo: 435-828-6221, 435-781-9785

Completion Supervisor Foreman

Jeff Samuels: 435-828-6515, 435-781-7046

Completion Manager

Jeff Dufresne: 720-929-6281, 303-241-8428

Vernal Main Office

435-789-3342

Emergency Contact Information—Call 911

Vernal Regional Hospital Emergency: 435-789-3342

Police: (435) 789-5835

Fire: 435-789-4222

Name NBU 921-33J GR Recomplete Perforation and CBP Summary

| | Perforations | | | | | | | | |
|-------|-----------------------------|------|------------|-----|-------|--|-------------------|-------|------|
| Stage | je Zones Top, ft Bottom, ft | | Bottom, ft | SPF | Holes | | Fracture Coverage | | |
| | | | | | | | | | |
| 1 | Green River | 4451 | 4455 | 4 | 16 | | 4450 | to | 4457 |
| | Green River | 4495 | 4497 | 4 | 8 | | 4495 | to | 4497 |
| | Green River | | | | | | | | |
| | Green River | | | | | | | | |
| | Green River | | | | | | | | |
| | Green River | | | | | | | | |
| | Green River | | | | | | | | |
| | | | | | | | | | |
| | # of Perfs/stage | | | | 24 | | CBP DEPTH | 4,184 | |
| | | | | | | | | | |
| 2 | Green River | 4024 | 4027 | 3 | 9 | | 4022 | to | 4029 |
| | Green River | 4063 | 4065 | 4 | 8 | | 4063 | to | 4066 |
| | Green River | 4132 | 4134 | 4 | 8 | | 4131 | to | 4135 |
| | Green River | | | | | | | | |
| | Green River | | | | | | | | |
| | Green River | | | | | | | | |
| | Green River | | | | | | | | |
| | Green River | | | | | | | | |
| | | | | | | | | | |
| | # of Perfs/stage | | | | 25 | | CBP DEPTH | 3,974 | |
| | | | | | | | | | |
| | | | | | | | | | |
| | Totals | | | | 49 | | | | |

0 Enter Number of swabbing days here for recompletes Fracturing Schedules Swabbing Days Name NBU 921-33J GR Recomplete Recomplete? Production Lo 0 Enter 1 if running a Production Log Copy to new book Slickwater Frac Pad? N DFIT 0 Enter Number of DFITs Υ ACTS? Md-Ft Perfs Rate Initial Final Fluid Volume Cum Vol Volume Cum Vol Fluid Sand Cum. Sand Footage from Scale Inhib. Fluid Sand % of of Pay Top, ft. Bot., ft SPF Holes BPM Zone BBLs BBLs Stage Туре ppg ppg gals gals frac % of frac lbs lbs CBP to Flush gal. 1 Green River 7.00 4451 4455 16 Varied Pump-in test Slickwater Green River 2.00 4495 4497 0 ISIP and 5 min ISIP 27 Green River 0.00 50 Slickwater Pad Slickwater 6,750 6,750 161 161 15.0% 0.0% 20 Green River 0.00 50 Slickwater Ramp 0.25 Slickwater 22,500 29,250 536 696 50.0% 37.3% 14,063 14,063 68 1,071 15,750 45,000 375 23,625 37,688 Ω Green River 0.00 50 Slickwater Ramp 2 Slickwater 35.0% 62.7% 2,906 47,906 69 37,688 0 50 Flush (4-1/2) 1,141 Green River 0.00 Slickwater ISDP and 5 min ISDF 0 Green River 0.00 Slickwater 0.00 0 Green River 37.688 0 Green River 0.00 Green River 0.00 47,906 69 1,141 27 142 Green River 0.00 Green River 0.00 0.00 Green River 45,000 0.00 Green River Sand laden Volume gal/ft 5,000 4,188 lbs sand/md-ft 9.00 # of Perfs/stage Flush depth 4451 CBP depth 4,184 267 22.8 << Above pump time (min) 7.00 4027 9 Varied Pump-in test 2 Green River 4024 Slickwater Green River 3.00 4063 4065 0 ISIP and 5 min ISIP 8,400 8,400 200 200 25 Green River 4.00 4132 4134 50 Slickwater Pad Slickwater 15.0% 0.0% Green River 0.00 50 Slickwater Ramp 0.25 Slickwater 28,000 36,400 667 867 50.0% 37.3% 17,500 17,500 84 50 Slickwater Ramp 1 2 Slickwater 19,600 56,000 467 1,333 29,400 46,900 Λ Green River 0.00 35.0% 62.7% 0.00 50 Flush (4-1/2) 2,627 58,627 63 1,396 46,900 0 Slickwater Green River 0.00ISDP and 5 min ISDF Slickwater 0 Green River 0.00 0 Green River Green River 0.00 46,900 0 1,396 Green River 0.00 58,627 63 Π 109 Green River 0.00 Green River 0.00 Green River 0.00 0.00 56,000 Green River Sand laden Volume 4.000 3.350 lbs sand/md-ft Flush depth 4024 CBP depth 3,974 50 14.00 # of Perfs/stage 27.9 << Above pump time (min) Totals 23.00 Total Fluid 106,532 gals 2,536 bbls Total Sand 84,588 2,536 bbls 5.6 tanks Total Scale Inhib. = 251 Total Stages stages Last Stage Flush gals Service Company Supplied Chemicals - Job Totals 52 GPT Friction Reducer gals @ GPT Surfactant 104 gals @ 1.0 GPT Clay Stabilizer 104 gals @ 1.0 15% Hcl 500 gals @ 250 gal/stg Iron Control for acid 3 gals @ 5.0 GPT of acid Surfactant for acid gals @ 1.0 GPT of acid 1 2.0 GPT of acid Corrosion Inhibitor for acid gals @ Third Party Supplied Chemicals Job Totals - Include Pumping Charge if Applicable Scale Inhibitor 251 gals pumped per schedule above 52

Biocide

gals @

0.5 GPT



May 12, 2011

Dustin K. Doucet
Petroleum Engineer
Division of Natural Resources, Division of Oil, Gas and Mining
State of Utah
PO Box 145801
Salt Lake City UT 84114-5801

Dear Mr. Doucet:

Dushr

We are in receipt of your letter dated April 14, 2011, regarding the shut-in and temporarily abandoned status of 17 wells operated by Kerr McGee Oil and Gas.

The attached list explains the status of each well referenced in your April 14, 2011, letter.

Please do not hesitate to contact me if you have any questions or concerns. I can be reached at 720-929-6515.

Sincerely,

Julie A. Jacobson

Regulatory Affairs Supervisor

Attachment

Accepted by the
Utah Division of
Oil, Gas and Mining
For Record Only

RECEIVED
MAY 1 6 2011

DIV. OF OIL, GAS & MINING

| | Anadarko Response to UDOC | GM Letter of April | 14, 2011 | | RECEIVED |
|------------|---------------------------|--------------------|----------------|---|------------|
| | Well Name | API | Lease | Status / Comment | Ш≷ |
| | Love 1121-16F | 43-047-36253 | ML-46532 | P&A procedure will be submitted by June 3, 2011. | |
| | NBU 1021-1G | 43-047-39001 | ML-23612 | Sundry approved on 5/3/2011 to convert to Birds Nest Monitor well. | 140 4-2 A. |
| - | NBU 1022-13I4S | 43-047-39475 | STUO-08512-ST | P&A sundry approved 4/19/2011; will be plugged in summer. | |
| | NBU 3-2B | 43-047-30267 | ML-22651 | P&A procedure will be submitted by June 3, 2011. | |
| | Bonanza 1023-16J | 43-047-37092 | ML-22186-A | TA approved by State on 4/19/2011. EXT to 12/31/2011 | |
| | NBU 921-34J | 43-047-37953 | State | Sundry to convert to a Birds Nest monitoring well will be submitted by June 3, 2011. | |
| ` | Hall ET AL 31 18 | 43-047-30664 | Fee | Will return to production - maintenance work will be completed by July 1, 2011. | |
| • | State 921-27L | 43-047-32466 | U-01194AST | Recomplete approved on 4/27/2011. | |
| | NBU 1022-16O | 43-047-35945 | ML-3276 | P&A procedure will be submitted by June 3, 2011. PA'd P&A procedure will be submitted by June 3, 2011. | |
| | NBU 1022-16E | 43-047-35949 | ML-3276 | | |
| | Lookout Point State 1-16 | 43-047-30544 | ML-22186-A | Replaced faulty surface equipment and returned to production. Recomplete procedure will be sult by June 3, 2011; will complete recompletion operations within 30 days after receipt of an approve permit. | |
| | CIGE 79D | 43-047-30896 | ML-23612 | Converted to SWD well; UDOGM approval on May 18, 2010. | |
| - | CIGE 240 | 43-047-33207 | ML-22935 | Recomplete sundry approved on 4/28/2011; work will be completed with 922-29F pad . | |
| <i>ب</i> | Ouray 32-146 | 43-047-33623 | ML-22052 | Will be returned to production - workover will be performed by July 1, 2011. | |
| | NBU 921-34L | 43-047-36388 | STUO-1194-AST | P&A procedure will be submitted by June 3, 2011. 6/6/2011 going to Conver Recomplete to the Green River sundry will be submitted by June 3, 2011. | t to |
| (~4 | NBU 921-33J | 43-047-36394 | STUO-015630-ST | Recomplete to the Green River sundry will be submitted by June 3, 2011. | ~ (1 |
| | NBU 438-19E | 43-047-37534 | ML-22792 | P&A procedure will be submitted by June 3, 2011 (recent attempts to return production have failed | ed). 🗸 |

Oil, Gas and Mining For Record Only Accepted by the Utah Division of



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA

Division Director

January 26, 2012

CERTIFIED MAIL NO.: 7011 0110 0001 3568 1731

Ms. Julie Jacobson Kerr McGee Oil and Gas 1099 18th Street, Suite 1800 Denver, CO 80202

43 047 36394 NBU 921-33J 99 21E 33

Subject: SECOND NOTICE: Extended Shut-in and Temporarily Abandoned Well Requirements for

Wells on Fee or State Leases

Dear Ms. Jacobson:

As of January 2012, Kerr McGee Oil and Gas (Kerr McGee) has sixteen (16) State Lease Wells (see Attachment A) that are in non-compliance with the requirements for extended shut-in or temporarily abandoned (SI/TA) status. Wells SI/TA beyond twelve (12) consecutive months requires the filing of a Sundry Notice in accordance with R649-3-36-1 for Utah Division of Oil. Gas & Mining (Division) approval. Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (R649-3-36-1.3.3).

This a **THIRD NOTICE** of non-compliance for NBU 1022-1314S which had a re-issued second notice on April 14, 2011. Later an approval to PA on April 19, 2011 was signed by the Division.

This is the **SECOND NOTICE** of non-compliance that Kerr McGee has received for wells listed as such on Attachment A. These wells received a first notice on April 14, 2011. Additional correspondence from Kerr McGee was received in May and June. Three (3) of the aforementioned wells (Attachment A) had previously been granted SI/TA extensions which have since expired.

This is also FIRST NOTICE for wells that have recently been added to Kerr McGee's non compliance list. Please submit the required information for extended SI/TA status within 30 days of this notice or further actions will be initiated.

Page 2 Kerr McGee Oil and Gas January 26, 2012

For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas & Mining with the following:

- 1. Reasons for SI/TA of the well (R649-3-36-1.1).
- 2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
- 3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

Please note that the Divisions preferred method for showing well integrity is by MIT

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).

- 1. Wellbore diagram, and
- 2. Copy of recent casing pressure test, and
- 3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
- 4. Fluid level in the wellbore, and
- 5. An explanation of how the submitted information proves integrity.

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Sincerely,

Dustin K. Doucet Petroleum Engineer

DKD/JP/js Enclosure

cc: Compliance File Well File

LaVonne Garrison, SITLA

ATTACHMENT A

| Well Name | API | LEASE | Years Inactive | SI/TA Extension Expired On | | | | | | | |
|------------------------|--------------|------------------------|-------------------|-------------------------------|--|--|--|--|--|--|--|
| 3 RD NOTICE | | | | | | | | | | | |
| 1 NBU 1022-13I4S | 43-047-39475 | STUO-08512-ST | 4 Years 2 Months | 12/31/2010 | | | | | | | |
| | | 2 ND NOTICE | | | | | | | | | |
| 2 BONANZA 1023-16J | 43-047-37092 | ML-22186-A | 4 Years 10 Months | 12/31/2011 | | | | | | | |
| 3 NBU 921-34J | 43-047-37953 | STATE | 4 Years 6 Months | 9/01/2009 | | | | | | | |
| 4 NBU 921-34L | 43-047-36388 | STUO-1194-A | 2 Years 9 Months | | | | | | | | |
| 5 NBU 921-33J | 43-047-36394 | STOU-015630 | 2 Years 11 Months | | | | | | | | |
| | | 1 ST NOTICE | | | | | | | | | |
| 6 UTE TRAIL U 88X2G | 43-047-15389 | ML-3352 | 1 Year 6 Months | | | | | | | | |
| 7 CIGE 3-32-9-22 | 43-047-30320 | ML-22649 | 1 Year 8 Months | | | | | | | | |
| 8 NBU 31-12B | 43-047-30385 | ML-01197-A | 1 Year 10 Months | | | | | | | | |
| 9 CIGE 51D | 43-047-30889 | U-01530-ST | 1 Year 6 Months | | | | | | | | |
| 0 NBU 69N2 | 43-047-31090 | U-01194-ST | 1 Year | | | | | | | | |
| 1 NBU 97 | 43-047-31744 | U-01189-ST | 1 Year 1 Month | | | | | | | | |
| 2 BONANAZA 1023-2I | 43-047-35663 | ML-47062 | 1 Year 5 Months | | | | | | | | |
| 3 NBU 921-25D | 43-047-36700 | UO-01189-ST | 1 Year 2 Months | | | | | | | | |
| 4 NBU 565-30E | 43-047-37533 | ML-22793 | 1 Year 11 Months | | | | | | | | |
| 5 STATE 1021-36D | 43-047-38845 | ML-47060 | 1 Year 5 Months | | | | | | | | |
| 6 NBU 661-24E | 43-047-50011 | ML-22790 | 1 Year 8 Months | | | | | | | | |



February 23, 2012

Dustin K. Doucet
Petroleum Engineer
Division of Natural Resources, Division of Oil, Gas and Mining
State of Utah
PO Box 145801
Salt Lake City UT 84114-5801

Dear Mr. Doucet:

We are in receipt of your letters dated January 26, 2012, regarding the shut-in and temporarily abandoned status of wells operated by Kerr McGee Oil and Gas.

The attached list explains the status of each well referenced in your January 26, 2012, letters.

Please do not hesitate to contact me if you have any questions or concerns. I can be reached at 720-929-6515.

Sincerely

Julie A. Jacobson

Regulatory Affairs Supervisor

Attachment

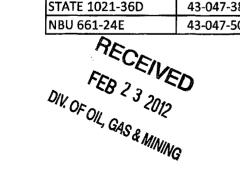
RECEIVED

FEB 2 3 2012

DIV. OF OIL, GAS & MINING

UDOGM LETTER(S)

| WELL | API | Lease | Comment |
|------------------|--------------|---------------|---|
| UTAH 10-415 | 43-015-30391 | ML-48189 | P&A procedure planned to be submitted |
| | | | P&A procedure approved in June 2011; work completed by April |
| NBU 1022-1314S | 43-047-39475 | STUO-08512-ST | 11, 2012 |
| Bonanza 1023-16J | 43-047-37092 | ML-22186-A | TA approved on 4/19/2011; considering use of wellbore |
| | | | June 2011 approved to convert to Birds Nest; convert by July 1, |
| NBU 921-34J | 43-047-37953 | STATE | 2012 |
| | | | June 2011 approved to convert to Birds Nest; convert by July 1, |
| NBU 921-34L | 43-047-36388 | STUO-1194-A | 2012 |
| NBY 921-33J | 43-047-36394 | STUO-015630 | Recompleted approved June 2011; on schedule |
| | | ML-3352 | |
| UTE Trail U88X2G | 43-047-15389 | (ML13826??) | Decision on well by May 1, 2012 |
| | | | Waiting for ground from recent activities to settle and then will |
| CIGE 3-32-9-22 | 43-047-30320 | ML-22649 | put well back on production |
| NBU 31-12B | 43-047-30385 | ML-01197 | Return to production by 5/1/2012 |
| CIGE 51D | 43-047-30889 | U-01530-ST | P&A procedure approved; will plug this year |
| NBU 69N2 | 43-047-31090 | U-01194-ST | Under review |
| | | | |
| NBU 97 | 43-047-31744 | U-01189-ST | TA'd due to pressure monitor; pad completion aroun 9/1/2012 |
| BONANZA 1023-21 | 43-047-35663 | ML-47062 | work over scheduled 6/1/2012 |
| | | | TA'd due to pressure monitor; expected to drill out around |
| NBU 921-25D | 43-047-36700 | UO-001189 | 9/1/2012 |
| | | | |
| NBU 565-30E | 43-047-37533 | ML-22793 | P&A producer approved; work will be completed 7/18/2012 |
| STATE 1021-36D | 43-047-38845 | ML-47060 | producing (as of 12/28/2011) |
| NBU 661-24E | 43-047-50011 | ML-22790 | producing (as of 12/28/2011) |



| | STATE OF UTAH | | FORM 9 |
|---|---|----------------------------|--|
| | DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | G | 5.LEASE DESIGNATION AND SERIAL NUMBER: STUO-015630-ST |
| SUNDF | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | |
| | oposals to drill new wells, significantly dee reenter plugged wells, or to drill horizontal n for such proposals. | | 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES |
| 1. TYPE OF WELL Gas Well | | | 8. WELL NAME and NUMBER: NBU 921-33J |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON | NSHORE, L.P. | | 9. API NUMBER: 43047363940000 |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t | PH h Street, Suite 600, Denver, CO, 80217 37 | ONE NUMBER: 720 929-6 | 9. FIELD and POOL or WILDCAT: |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: | | | COUNTY: UINTAH |
| 2113 FSL 1951 FEL QTR/QTR, SECTION, TOWNSI Qtr/Qtr: NWSE Section: 3 | HIP, RANGE, MERIDIAN: 33 Township: 09.0S Range: 21.0E Meridian | : S | STATE: UTAH |
| 11. CHEC | K APPROPRIATE BOXES TO INDICATE N | NATURE OF NOTICE, REPOF | ₹T, OR OTHER DATA |
| TYPE OF SUBMISSION | | TYPE OF ACTION | |
| | ACIDIZE | ALTER CASING | CASING REPAIR |
| NOTICE OF INTENT Approximate date work will start: | CHANGE TO PREVIOUS PLANS | CHANGE TUBING | CHANGE WELL NAME |
| 6/2/2014 | CHANGE WELL STATUS | CONVERT WELL TYPE | |
| SUBSEQUENT REPORT | DEEPEN | FRACTURE TREAT | ☐ NEW CONSTRUCTION |
| Date of Work Completion: | ☐ OPERATOR CHANGE | PLUG AND ABANDON | PLUG BACK |
| | PRODUCTION START OR RESUME | RECLAMATION OF WELL SITE | RECOMPLETE DIFFERENT FORMATION |
| SPUD REPORT Date of Spud: | REPERFORATE CURRENT FORMATION | | |
| Jane or opau. | | SIDETRACK TO REPAIR WELL | ☐ TEMPORARY ABANDON |
| | L TUBING REPAIR | VENT OR FLARE | ☐ WATER DISPOSAL |
| DRILLING REPORT Report Date: | WATER SHUTOFF | SI TA STATUS EXTENSION | APD EXTENSION |
| | WILDCAT WELL DETERMINATION | OTHER | OTHER: |
| I . | COMPLETED OPERATIONS. Clearly show all p | | |
| | sts authorization to Plug and A | | proved by the th Division of |
| · · | ation. Please see the attached nment procedure. Thank you. | | Gas and Mining |
| Abando | illient procedure. Thank you. | - In | ly 09, 2014 |
| | | Date: | 1 |
| | | By: | lot K Unt |
| | | | |
| | | | |
| | | nı n | |
| | | Please Revi | iew Attached Conditions of Approval |
| | | | |
| | | | |
| | | | |
| | | | |
| | | 1 | |
| NAME (PLEASE PRINT) Matthew P Wold | PHONE NUMBER 720 929-6993 | TITLE Regulatory Analyst I | |
| SIGNATURE | | DATE | |
| N/A | | 6/2/2014 | |



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047363940000

- 1. Notify the Division at least 24 hours prior to conducting abandonment operations. Please call Dan Jarvis at 801-538-5338.
- 2. All balanced plugs shall be tagged to ensure they are at the depths specified in the procedure.
 - 3. All annuli shall be cemented from a minimum depth of 100' to the surface.
 - 4. Surface reclamation shall be done in accordance with R649-3-34 Well Site Restoration.
 - 5. All requirements in the Oil and Gas Conservation General Rule R649-3-24 shall apply.
- 6. If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (ofc) or 801-733-0983 (home) prior to continuing with the procedure.
- 7. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.

RECEIVED: Jul. 09, 2014

TD:

9400 **TVD**:

9400 **PBTD**:

9928

| 7/9/2014 | | Wellbo | lbore Diagram | | | | | | |
|--------------|--------------------------|--|-----------------|----------------|-----------------|-----------------|----------|-------------|---------|
| API We | ell No: 43-047-3 | 36394-00-00 Per n | nit No: | | Well Nam | e/No: NBU | 921-33J | | |
| Compa | ny Name: KER | RR-MCGEE OIL & GA | AS ONSHORE, | L.P. | | | | | |
| Locatio | n: Sec: 33 T: 9 | S R: 21E Spot: NWS | SE S | String Info | rmation | | | | |
| | nates: X: 62343 | | | _ | Bottom | Diameter | Weight | Length | Capu |
| | ame: NATURA | | | String | (ft sub) | (inches) | (lb/ft) | (ft) | - C+7 C |
| | Name: UINTA | | | HOL1 | 40 | 20 | | | |
| County | Name. Onviza | 11 | | COND | 40 | 14 | 36.7 | 40 | |
| П | | | | HOL2 | 2550 | 12.25 | | 2 | |
| | | O | d S | SURF | 2550 | 9.625 | 32.3 | 2550 | |
| +a 10 11 | Cement from | 1 40 ft. to surface | j#5 | HOL3 | 9400 | 7.875 | 11.6 | 0.400 | |
| Pb/1 | Conductor: 1 | 14 in. @ 40 ft. \overline{14} in. @ 40 ft. \overline{15} 300 \overline{15} 40 ft. \overline{15} 300 \overline{15} 40 ft. \overline{15} 260 | (124.18 XCVI) | PROD | 9400 | 4.5 | 11.6 | 9400 | 11.4 |
| | Hole: 20 in. (| @ 40 ft. | = 235X | 11 ~~ !! | 8212 | 2.375 | | | |
| 3-1-2 | 300 | 10 ft to surface 20 | 5/1/10-12-0 | 9 3/3" | x 4 ½" | | | | 3.09 |
| | Cement nom 9 | 717 It. 10 Surface | 7 (100) (104) | -735x | | | | | |
| 1111 | | | a | Cendul 1 | | | | | |
| na' = | 1590 | | Pan | se 98 sx | | | | | |
| nsi w NAV | 1710 | | (.0%- | 2C 10 2K | VOL. | | | | |
| LAV M | Surface 0 625 | in @ 2550 B | | Cement In | formation | | | | |
| - | Surface: 9,625 | | | | | TOC | | | |
| 14-13 | Hole: 12.25 in. 2400/ | . @ 2550 ft. Plant # 4 | | String | BOC (ft sub) | TOC (ft sub) | Class | Sacks | |
| 1111 | • | (63×) (1-15) (11.7 | (51) 820 | COND | 40 | 0 | UK | 28 | |
| / | | (6 3 ×)(1-15)(11.1 | 139)= 030 | PROD | 9400 | 260 | HS | 535 | |
| 4' | | 700 | C1590 /01/ | PROD | 9400 | 260 | 50 | 1475 | |
| PARCK | 3530 | DI HO | - 10 | SURF | 919 | 0 | HG | 230 | |
| | 3740 | Plug #3 175x= 224 | | SURF | 919 | 0 | G | 200 | |
| | 3740 | 175x= 2241 | | SURF | 2550 | 1816 | HG | 230 | |
| 1111 | | Tou | C 3530 | SURF | 2550 | 1816 | G | 200 | |
| 1111 | | | @35301 VSW 1 | Parforation | n Informati | ion | | | |
| 1111 | | ν). | | Ton | Rottom | ion | | | |
| 1111 | - nu 1 | Plug # 2 | | (ft sub) | (ft sub) | Shts/ | Ft No SI | nts Dt Sque | eze |
| 141 | 4840 | 62 20 20 | 1102-2211 | 6234 | 9160 | | | | |
| 1714 | 20201 1 | (170x)(1.15)(11. | 459)= 224 | 5853 | 6180 | | | | |
| X14 - | 5700 CIBPES8 | rnal | TOCE 4940 | 1/21 | | | | | |
| 7. | COLCZ | Plug # (852) (1.10) To | | · 00C. | | | | | |
| , C | 2007 | Plus# | 1 | | | | | | |
| 1111 | | 1,00 | | | | | | | |
| 1111 | / | (SSE) (1-10) | 111150)=1 | 05 | | | | | |
| | >680° | (6,1) | (16421) | Formation | Informatio | n | | | |
| 1111 | γγ | To | ces700' | Formatio | n Depth | | | | |
| | ≈ 234 | | Voy | UNTA | 0 | | | | |
| | | | | CDDV | 1500 | | | | |
| 565'- | Cement from 94 | 00 ft. to 260 ft. | | | 1506 2174 | | | | |
| 565'- VRD | Tubing: 2.375 in | . @ 8212 ft. | | MHGBN PARCK | 3164 | | | | |
| | | | | WSTC | 4814 | | | | |
| | Production: 4.5 i | in. @ 9400 ft. | | MVRD | 7565 | | | | |
| 1 1 | >9160' | | | 111 11112 | 1000 | | | | |
| | | | | | | | | | |
| | Hole: 7.875 in. @ | @ 9400 ft | | | | | | | |

NBU 921-33J 1951' FEL & 2113' FSL NWSE SEC. 33, T9S, R21E Uintah County, UT

 KBE:
 5039'
 API NUMBER:
 4304736394

 GLE:
 5022'
 LEASE NUMBER:
 STUO-015630-ST

 TD:
 9438'
 LAT/LONG:
 39.99042/-109.55416

PBTD: 9371'

CASING: 12 1/4" hole

9.625" 32.3# H-40 @ 2091' 9.625" 36.0# J-55@ 2549' Cmt w/ 680 sx class G

7.875" hole

4.5" 11.6# I-80 @ 9395' TOC @ ~260' per CBL

PERFORATIONS: Wasatch 5853' – 7697'

Mesaverde 7966' - 9160'

TUBING: 2 3/8" 4.7# J-55 tbg at 5810', per completion report dated 10/16/08.

| Tubular/Borehole | Drift | Collapse | Burst | Capacitie | apacities | | |
|--------------------------------|--------|----------|--------|-----------|-----------|---------|---------|
| | inches | psi | psi | Gal./ft. | Cuft/ft. | | ВЫ./ft. |
| 2.375" 4.7# J-55 tbg. | 1.901 | 8100 | 7700 | 0.1624 | | 0.02171 | 0.00387 |
| 4.5° 11.6# I-80 | 3.875 | 6350 | 7780 | 0.6528 | | 0.0872 | 0.0155 |
| 9.625" 32.3# H-40 | 8.845 | 1400 | 2270 | 3.3055 | | 0.4418 | 0.0787 |
| Annular Capacities | | | | | | | |
| 2.375" tbg. X 4 1/2" 11.6# csg | | | | 0.4227 | 0.0565 | | 0.01 |
| 4.5° csg X 9 5/8° 32.3# csg | | | | 2.478 | 0.3314 | | 0.059 |
| 4.5° csg X 7.875 borehole | | | | 1.704 | 0.2278 | | 0.0406 |
| 9.625" csg X 12 1/4" borehole | | | | 2.3428 | 0.3132 | | 0.0558 |
| 9 .625" csg X 14" csg | | 3.4852 | 0.4659 | | 0.083 | | |
| 14" csg X 20" borehole | · | | | 8.3232 | 1.1126 | | 0.1982 |

GEOLOGIC INFORMATION:

Formation Depth to top, ft.
Uinta Surface

 Green River
 1693'

 Birds Nest
 1791'

 Mahogany
 2292'

 Wasatch
 4943'

 Mesaverde
 7774'

Tech. Pub. #92 Base of USDW's

USDW Elevation ~1400' MSL USDW Depth ~3639' KBE

RECEIVED: Jun. 02, 2014

NBU 921-33J PLUG & ABANDONMENT PROCEDURE

GENERAL

- H2S MAY BE PRESENT. CHECK FOR H2S AND TAKE APPROPRIATE PRECAUTIONS.
- CEMENT QUANTITIES BELOW ASSUME NEAT CLASS G, YIELD 1.145 CUFT./SX. IF A DIFFERENT PRODUCT IS USED, WELLSITE PERSONNEL ARE RESONSIBLE FOR CORRECTING QUANTITIES TO YIELD THE STATED SLURRY VOLUME. WHEN SQUEEZING, INCLUDE 10% EXCESS PER 1000' OF DEPTH
- TREATED FRESH WATER WILL BE PLACED BETWEEN ALL PLUGS INSTEAD OF BRINE.
- ALL DISPLACEMENT FLUID SHALL CONTAIN CORROSION INHIBITOR AND BIOCIDE. PREMIX 5
 GALLONS PER 100 BBLS FLUID.
- NOTIFY APPROPRIATE AGENCY 24 HOURS BEFORE MOVING ON LOCATION.
- A GPS READING WILL NEED TO BE TAKEN AT THE WELL SITE AND RECORDED IN OPENWELLS.
 PLEASE TAKE IT TO THE 6TH DECIMAL PLACE.

PROCEDURE

Note: Approx. 202 sx Class "G" cement needed for procedure & (1) 4.5" CIBP

Note: No gyro survey on record for this wellbore.

- 1. A GPS READING WILL NEED TO BE TAKEN AT THE WELL SITE AND RECORDED IN OPENWELLS. PLEASE TAKE IT TO THE 6TH DECIMAL PLACE.
- 2. MIRU. KILL WELL AS NEEDED. ND WH, NU AND TEST BOPE.
- 3. POOH W/ TBG & L/D SAME. RU WIRELINE AND MAKE A GAUGE RING RUN TO CHECK FOR FILL. RUN GYRO SURVEY.
- 4. PLUG #1, ISOLATE WASATCH/MESAVERDE PERFORATIONS (5853' 7697' and 7966' 9160'): RIH W/ 4 ½" CIBP. SET @ ~5800'. RELEASE CIBP, PUH 10', BRK CIRC W/ FRESH WATER. RELEASE CIBP, PUH 10', BRK CIRC W/ TREATED FRESH WATER. DISPLACE A MINIMUM OF 8.95 CUFT / 1.6 BBL /~7.82 SX ON TOP OF PLUG. PUH ABOVE TOC (~5700'). REVERSE CIRCULATE W/ TREATED WATER (~11.7 BBLS).
- 5. PLUG #2, PROTECT TOP OF WASATCH (4943'): PUH TO ~5050'. BRK CIRC W/ FRESH WATER. DISPLACE 18.8 CUFT / 3.4 BBL /~16.4 SX AND BALANCE PLUG W/ TOC @ ~4840' (210' COVERAGE). PUH ABOVE TOC. REVERSE CIRCULATE W/ TREATED WATER (~17.1 BBLS).
- 6. PLUG #3, PROTECT BASE OF USDW (3639'): PUH TO ~3740'. BRK CIRC W/ FRESH WATER. DISPLACE 18.8 CUFT / 3.4 BBL /~16.4 SX AND BALANCE PLUG W/ TOC @ ~3530' (210' COVERAGE). PUH ABOVE TOC. REVERSE CIRCULATE W/ TREATED WATER (~17.5 BBLS).
- 7. PLUG #4, PROTECT TOP OF MAHOGANY (2292'), TOP OF BIRD'S NEST (~1791') & TOP OF GREEN RIVER (1693'): PUH TO ~2400'. BRK CIRC W/ FRESH WATER. DISPLACE 72.5 CUFT / 12.9 BBL /~63.3 SX AND BALANCE PLUG W/ TOC @ ~1590' (810' COVERAGE). PUH ABOVE TOC. REVERSE CIRCULATE W/ TREATED WATER (~20.0 BBLS).
- 8. PLUG #5, FILL SURFACE HOLE & ANNULUS: POOH. HOOK UP 1" PIPE AND PUMP 113 CUFT / 20.1 BBL /~98.7 SX OR SUFFICIENT VOLUME TO FILL 4 ½" CASING F/ 300' TO SURFACE AND 4.5" X 9.625" ANNULUS F/ 260' TO SURFACE.
- 9. CUT OFF WELLHEAD AND INSTALL MARKER PER REGULATIONS.
- 10. RDMO. TURN OVER TO OPERATIONS FOR SURFACE REHAB. SURFACE RECLAMATION TO BE PERFORMED IN ACCORDANCE TO REGULATIONS.

MJD 5/20/2014

| Mar American Mar | | PROJECT COMPUTATION |
|------------------|--|--|
| Petroleum | Corporation | NOOFSHEET |
| DATE | PROJECT | NBU 921-33) JOB NO. |
| | | SUBJECT |
| BY | CHK.: | SUBJECT |
| | | |
| ~ - d' | | (1) CIBP @ 5800'. |
| ,3132 95% 41/2 | and the second s | CMT to 5700' |
| 1,3314 | 2604 | (5800-5700)(10895) = 8,95 ft 3 = 7,82 sacd |
| | | |
| | .0895 | @ CMT 48402-5050' |
| | 9 | (5050-4840) (,0895) = 18.795ft = 16.4 sac |
| 114 | | - GR 1693' |
| | / ///// +// | - BN 1791' (3) CMT 3530-3740 |
| | 1//4/4/ | -Mah 2292' (3740-3530)(,0895)=18.795 43=16.45a |
| | 2549 | (1170 3)30)(1707) - 10:1177 - 16:154 |
| | | (4) CMT 1590-2400' |
| | | (2400-1590) (.0895) = 72.495 A+ = 63.3 s |
| | 3 | |
| | | |
| V | | — usow 3639' |
| | | |
| | | 6) CMT Surface - 300' (300)(0895) = 26.8 |
| 12278 | | © CMT Surface - 300' (300)(.0895) = 26.8 CMT SURface - 260' (260)(.3314) = 96.16 |
| 72278 | 3 | © CMT Surface - 300' (300)(.0895) = 26.85 CMT SURface - 260' (260)(.3314) = 96.16 113.00 |
| 12278 | | 6) CMT Surface - 300' (300)(.0895) = 26.8 CMT Surface - 260' (260)(.3314) = 86.16 |
| 72278 | B | © CMT Surface - 300' (300)(.0895) = 26.8 CMT SURface - 260' (260)(.3314) = 96.16 113.0 |
| 72278 | | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT SURface - 260' (260)(.3314) = 86.16 113.0 - WAS 4943' 113.044ft ³ = 98.75a |
| 72278 | | © CMT Surface - 300' (300)(.0895) = 26.8 CMT SURface - 260' (260)(.3314) = 96.16 113.0 |
| 7278 | | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT SURface - 260' (260)(.3314) = 86.16 113.0 - WAS 4943' 113.044ft ³ = 98.75a |
| 72278 | | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT Surface - 260' (260)(.3314) = 86.16 113.04 - WAS 4943' 113.04473 = 98.75a |
| 72278 | | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT SURFACE - 260' (260)(.3314) = 86.16 113.04 - WAS 4943' 113.04 ft 3 = 98.7 sac 53'-7697' |
| 72278 | | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT Surface - 260' (260)(.3314) = 86.16 113.04 - WAS 4943' 113.04473 = 98.75a |
| 72278 | | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT SURFACE - 260' (260)(.3314) = 86.16 113.0 - WAS 4943' 113.044ft3 = 98.75a |
| 72278 | Perfs 58 | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT SURFACE - 260' (260)(.3314) = 86.16 113.0 - WAS 4943' 113.044ft3 = 98.75a |
| 72278 | | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT SURFACE - 260' (260)(.3314) = 86.16 113.00 — WAS 4943' 113.014 ft ³ = 98.7 sa. 53'-7697' |
| | Perfs 58 | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT SURFACE - 260' (260)(.3314) = 86.16 113.00 — WAS 4943' 113.014 ft ³ = 98.7 sa. 53'-7697' |
| 72278 | Perfs 58 Perfs 791 | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT SURFACE - 260' (260)(.3314) = 86.16 113.00 — WAS 4943' 113.014 ft ³ = 98.7 sa. 53'-7697' |
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| | Perfs 58 Perfs 791 | (5) CMT Surface - 300' (300)(.0895) = 26.85 CMT SURFACE - 260' (260)(.3314) = 86.16 113.04 - WAS 4943' 113.044ft3 = 98.7 sac |
| | Perfs 58 Perfs 791 | (5) CMT Surface - 300' (300)(.0895) = 26.85 CMT SURFACE - 260' (260)(.3314) = 86.16 113.04 - WAS 4943' 113.044ft3 = 98.7 sac |
| | Perfs 58 Perfs 791 | (5) CMT Surface - 300' (300)(.0895) = 26.8 CMT SURFACE - 260' (260)(.3314) = 86.16 113.00 — WAS 4943' 113.014 ft ³ = 98.7 sa. 53'-7697' |



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

September 4, 2014

CERTIFIED MAIL NO.: 7011 2970 0001 8828 1634

Mr. Andy Lytle Kerr-McGee Oil and Gas Onshore 1099 18TH Street Denver, CO 80202 43 047 36394 NBU 921-335 33 95 21E

Subject: Extended Shut-in and Temporary Abandoned Well Requirements for Fee or State Leases

Dear Mr. Lytle:

As of April 2014, Kerr-McGee Oil and Gas Onshore (Kerr-McGee) has nineteen (19) State Lease Wells and one (1) Fee Lease Well (see attachment A) that are currently in non-compliance with the requirements for extended shut-in or temporarily abandoned (SI/TA) status. Thirteen (13) wells were added to Kerr-McGee's SI/TA list in 2014.

Seven (7) of these wells (attachment A) have previously been issued notices of non-compliance and have remained in non-compliance. Three (3) of these wells (attachment A) have been shut-in beyond five (5) years and are cause for concern due to unknown status of well integrity. The Division acknowledges that Kerr-McGee has plans to plug two (2) of the wells listed (attachment A) and has approved plugging procedures.

Kerr-McGee shall submit plans for each well stating which wells will be plugged with accompanying procedures, placed back on production, or requesting SI/TA extension with proof of wellbore integrity and good cause for such request. All wells need an individual sundry filed and are required to meet the SI/TA rules as listed below.



Page 2 Kerr-McGee Oil and Gas Onshore September 4, 2014

Wells SI/TA beyond twelve (12) consecutive months requires filing a Sundry Notice (R649-3-36-1). Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (649-3-36-1.3.3). For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas & Mining with the following:

- 1. Reasons for SI/TA of the well (R649-3-36-1.1)
- 2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
- 3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

Please note that the Divisions preferred method for showing well integrity is by MIT

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).

- 1. Wellbore diagram, and
- 2. Copy of recent casing pressure test, and
- 3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
- 4. Fluid level in the wellbore, and
- 5. An explanation of how the submitted information proves integrity.

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Sincerely.

Dustin K. Doucet Petroleum Engineer

DKD/JP/js

cc: Compliance File
Well File

LaVonne Garrison, SITLA

N:\O&G Reviewed Docs\ChronFile\PetroleumEngineer\SITA

ATTACHMENT A

| | Well Name | API | LEASE | Years Inactive | Prior Notice |
|----|-------------------------------|--------------|-------------|-------------------|------------------------|
| 1 | BONANZA 1023-16J | 43-047-37092 | ML-22186-A | 7 years 1 month | 2 ND NOTICE |
| 2 | NBU 921-34L | 43-047-36388 | STUO-1194-A | 5 years | 2 ND NOTICE |
| 3 | CIGE 79D | 43-047-30896 | ML-23612 | 4 years 4 months | 2 ND NOTICE |
| 4 | NBU 921-33J (will PA 6/2/14) | 43-047-36394 | STUO-015630 | 5 years 2 months | 2 ND NOTICE |
| 5 | CIGE 3-32-9-22 | 43-047-30320 | ML-22649 | 3 years 11 months | 1 ST NOTICE |
| 6 | NBU 31-12B | 43-047-30385 | ML-01197-A | 2 years 10 months | 1 ST NOTICE |
| 7 | NBU 69N2 | 43-047-31090 | U-01194-ST | 3 years 3 months | 1 ST NOTICE |
| 8 | BONANZA 1023-20 | 43-047-35662 | ML-47062 | 1 year 1 month | |
| 9 | CIGE 140 | 43-047-31977 | ML-10755 | 1 year | |
| 10 | CIGE 224 | 43-047-32883 | ML-2252 | 1 year | |
| 11 | CIGE 239 | 43-047-33206 | ML-22582 | 1 year 6 months | |
| 12 | CIGE 284 | 43-047-34792 | ML-23612 | 1 year 2 months | |
| 13 | CIGE 5 | 43-047-30335 | U01207A-ST | 1 year 3 months | |
| 14 | HALL ET AL 31 18 | 43-047-30664 | FEE | 1 year 1 month | |
| 15 | MORGAN STATE 13-36 | 43-047-32817 | ML-22265 | 1 year 11 months | |
| 16 | NBU 1021-16G | 43-047-35111 | ML-10755 | 1 year 4 months | |
| 17 | NBU 562-19E (will PA 5/23/14) | 43-047-37536 | ML-22792 | 1 year | |
| 18 | STATE 1022-32I | 43-047-35648 | ML-22798 | 1 year 2 months | |
| 19 | TRIBAL 31-60 | 43-047-33340 | ML-28048 | 1 year 2 months | |
| 20 | WONSITS ST 2-32 | 43-047-32819 | ML-47780 | 1 year | |

| | STATE OF UTAH | | | | FORM 9 |
|--|---|----------------------------|--|-----------------------|--|
| ī | DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI | | ì | | ESIGNATION AND SERIAL NUMBER: 15630-ST |
| SUNDR | 6. IF INDIA | N, ALLOTTEE OR TRIBE NAME: | | | |
| | posals to drill new wells, significantly reenter plugged wells, or to drill horiz n for such proposals. | | | | CA AGREEMENT NAME: _ BUTTES |
| 1. TYPE OF WELL Gas Well | | | | 8. WELL N NBU 921 | AME and NUMBER: -33J |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON | ISHORE, L.P. | | | 9. API NUN 4304736 | IBER: 63940000 |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th | n Street, Suite 600, Denver, CO, 802 | | NE NUMBER: 9 720 929-6 | | nd POOL or WILDCAT: _ BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 2113 FSL 1951 FEL | | | | COUNTY: UINTAH | |
| QTR/QTR, SECTION, TOWNSH | HIP, RANGE, MERIDIAN: 33 Township: 09.0S Range: 21.0E Mer | idian: | S | STATE: UTAH | |
| 11. CHECK | K APPROPRIATE BOXES TO INDICA | ATE N | ATURE OF NOTICE, REPOR | T, OR OT | HER DATA |
| TYPE OF SUBMISSION | | | TYPE OF ACTION | | |
| П | ACIDIZE | | ALTER CASING | | ASING REPAIR |
| NOTICE OF INTENT Approximate date work will start: | CHANGE TO PREVIOUS PLANS | | CHANGE TUBING | | HANGE WELL NAME |
| ✓ SUBSEQUENT REPORT | CHANGE WELL STATUS | | COMMINGLE PRODUCING FORMATIONS | | CONVERT WELL TYPE |
| Date of Work Completion: 10/21/2014 | DEEPEN | | RACTURE TREAT | | IEW CONSTRUCTION |
| | OPERATOR CHANGE | | | | LUG BACK |
| SPUD REPORT Date of Spud: | PRODUCTION START OR RESUME | | RECLAMATION OF WELL SITE | | ECOMPLETE DIFFERENT FORMATION |
| | REPERFORATE CURRENT FORMATION | | SIDETRACK TO REPAIR WELL | | EMPORARY ABANDON |
| DRILLING REPORT | L TUBING REPAIR | | ENT OR FLARE | | VATER DISPOSAL |
| Report Date: | WATER SHUTOFF | ∟ s | SI TA STATUS EXTENSION | L A | PD EXTENSION |
| | WILDCAT WELL DETERMINATION | c | OTHER | OTHER: | |
| In reference to th Shut-in and Tempora has been plugg | COMPLETED OPERATIONS. Clearly showned UDOGM letter dated 09/ary Abandoned Well Required and abandoned, see the order of the reclamation shall be R649-3-34. | 04/2 eme atta | 014 for Extended nts the NBU 921-33J ched operations | oil, FOR | mes, etc. ccepted by the tah Division of Gas and Mining RECORD ONLY ovember 04, 2014 |
| NAME (PLEASE PRINT) Kay E. Kelly | PHONE NUM 720 929 6582 | BER | TITLE Regulatory Analyst | | |
| SIGNATURE N/A | | DATE 11/3/2014 | | | |

| | | | | | | KIES RE | | |
|----------------------------|---------------------|---------------|------------|------------|-------------|---------|----------------|--|
| | | | | Opera | ition S | umma | ry Report | |
| Well: NBU 921-3 | | | | | - | | Spud Date: 10 | |
| Project: UTAH-U | INTAH | | Site: NBL | J 921-33J | J | | | Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3 |
| Event: ABANDO | NMENT | | Start Date | e: 10/10/2 | 2014 | | | End Date: 10/21/2014 |
| Active Datum: RI _evel) | KB @5,038.99usft (a | bove Mean Se | ea | UWI: NE | BU 921-3 | 3J | | |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation |
| 10/16/2014 | 7:00 - 10:30 | 3.50 | ABANDP | 30 | А | Р | | LAT 39.99042 LONG -109.55416, MIRU, 50# FCP, 0# ON TBG, ND WH, NU BOP'S, RU FLOOR & TBG EQUIP |
| | 10:30 - 13:00 | 2.50 | ABANDP | 31 | I | Р | | MIRU SCAN TECH, TOOH & SCAN 2-3/8" TBG, TBG SCAN SHOWED 182 YELLOW JTS & 1 RED JNT, LIGHT EXTERNAL SCALE THROUGH TBG STRING, RD SCAN TECH |
| | 13:00 - 14:30 | 1.50 | ABANDP | 34 | I | Р | | MIRU CUTTERS WIRELINE, RIH & SET CIBP @ 5800', POOH, RD CUTTERS |
| | 14:30 - 17:00 | 2.50 | ABANDP | 31 | I | Р | | TIH W/ 2-3/8" TBG TO CIBP @ 5800', FILL CSG W/ T-MAC & PRESSURE TEST TO 500#, HELD GOOD, SWI, SDFN |
| 10/17/2014 | 6:45 - 7:00 | 0.25 | ABANDP | 48 | | Р | | HSM. |
| | 7:00 - 12:00 | 5.00 | ABANDP | 35 | E | Р | | MIRU MULTI SHOT. GYRO WELL BORE F/ SURFACE T/ 5800'. POOH. |
| 10/20/2014 | 6:45 - 7:00 | 0.25 | ABANDP | 48 | | Р | | HSM. STAY AWAY F/ PUMP LINES WHEN PUMPING CMT. |
| | 7:00 - 13:00 | 6.00 | ABANDP | 51 | D | P | | MIRU BAKER HUGES CMT CREW. OPEN WELL 0 PSI. BRK CONV CIRC. 1st CMT BP, PUMP 13 SX CLASS G CMT. 168' CMT PLUG ON CIBP. F/ 5800' T/ 5632' = 168' PLUG. DISPLACE CMT W/ 21 BBLS T-MAC. POOH LD 23 JTS 23/8 TBG. EOT @ 5065'. 2nd CMT BP, PUMP 21 SX G CMT = 280' BP F/ 5065' T/ 4785'. DISP W/ 18 BBLS T-MAC. POOH LD 42 JTS TBG. EOT @ 3735'. 3rd CMT BP, PUMP 21 SX G CMT = 280' BP F/ 3735' T/ 3455'. DISP W/ 13 BBLS T-MAC. POOH LD 42 JTS TBG. EOT @ 2406'. 4th CMT BP, PUMP 68 SX G CMT = 897' BP F/ 2406' T/ 1509'. DISP W/ 8 BBLS T-MAC. POOH T/ 1500'. REV CMT. POOH T/ 1200'. SWIFN. WAIT T/ TAG CMT IN THE :AM. NOTE - RICK POWELL REQUESTED 5 SX MORE ON |
| 10/21/2014 | 7:00 - 7:15 | 0.25 | ABANDP | 48 | | Р | | EACH PLUG. SAFETY = JSA. |

11/3/2014 1:46:30PM 1

| Sundry | Number: | 57334 7 | APT We | 11 1 | lumbe | r: 4 | 30473639 | 940000 | | | | |
|---|---|---------------|------------|------------|-------------|--|----------------|--|--|--|--|--|
| | Sundry Number: 57334 APT Well Number: 43047363940000 US ROCKIES REGION Operation Summary Report | | | | | | | | | | | |
| Well: NBU 921-33J Spud Date: 10/21/2006 | | | | | | | | | | | | |
| Project: UTAH-L | Site: NBL | J 921-33J | | | | Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3 | | | | | | |
| Event: ABANDO | NMENT | | Start Date | e: 10/10/2 | 014 | | | End Date: 10/21/2014 | | | | |
| Active Datum: R Level) | RKB @5,038.99usft (al | bove Mean Se | a | UWI: NE | 3U 921-3 | 3J | | | | | | |
| Date | Time Start-End | Duration (hr) | Phase | Code | Sub Code | P/U | MD From (usft) | Operation | | | | |
| | 7:15 - 16:30 | 9.25 | ABANDP | 30 | | P | | RIH W/ TBG. T/U ON CMT PLUG W/ TOTAL OF 76JTS 2-3/8" TBNG @1590'. L/D 66JTS TBG. EOT @300' PUMP 98SX NEAT "G" 15.8# CMT TO SURFACE. POOH W/ TBNG. R/D FLOOR & TBG EQUIP. NDBOP. RDMO RIG. EXPOSE WELLHEAD. CUT WELLHEAD. WASH DOWN 1" TBG BETWEEN 4-1/2" CSG & 9-5/8" CSNG W/ 1# PIPE. WASH DOWN TO 75'. PUMP 45SX 15.8# NEAT "G" CMT BACK TO SURFAE. CUT OFF 1" CSNG. WELD ON P&A PLATE. WELL COMPLETE. SDFN. | | | | |
| | | | | | | | | WELLHEAD COORDINATES: LAT: 39.99046 LONG: -109.55347 | | | | |

11/3/2014 1:46:30PM 2

RECEIVED: Nov. 03, 2014

| | STATE OF UTAH | | FORM 9 |
|---|--|--|--|
| | DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN | | 5.LEASE DESIGNATION AND SERIAL NUMBER: STUO-015630-ST |
| SUNDF | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | |
| | oposals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals. | | 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES |
| 1. TYPE OF WELL Gas Well | | | 8. WELL NAME and NUMBER: NBU 921-33J |
| 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON | NSHORE, L.P. | | 9. API NUMBER: 43047363940000 |
| 3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t | h Street, Suite 600, Denver, CO, 80217 | PHONE NUMBER: 7 3779 720 929- | 9. FIELD and POOL or WILDCAT: 6 INATURAL BUTTES |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: | | | COUNTY: UINTAH |
| 2113 FSL 1951 FEL QTR/QTR, SECTION, TOWNSI Qtr/Qtr: NWSE Section: 3 | HIP, RANGE, MERIDIAN: 33 Township: 09.0S Range: 21.0E Merio | dian: S | STATE: UTAH |
| 11. CHEC | K APPROPRIATE BOXES TO INDICAT | TE NATURE OF NOTICE, REPOR | RT, OR OTHER DATA |
| TYPE OF SUBMISSION | | TYPE OF ACTION | |
| | ACIDIZE | ALTER CASING | CASING REPAIR |
| NOTICE OF INTENT Approximate date work will start: | CHANGE TO PREVIOUS PLANS | CHANGE TUBING | CHANGE WELL NAME |
| 7,550 | CHANGE WELL STATUS | COMMINGLE PRODUCING FORMATIONS | CONVERT WELL TYPE |
| SUBSEQUENT REPORT Date of Work Completion: | DEEPEN | FRACTURE TREAT | NEW CONSTRUCTION |
| 11/4/2014 | OPERATOR CHANGE | PLUG AND ABANDON | PLUG BACK |
| SPUD REPORT | PRODUCTION START OR RESUME | RECLAMATION OF WELL SITE | RECOMPLETE DIFFERENT FORMATION |
| Date of Spud: | REPERFORATE CURRENT FORMATION | SIDETRACK TO REPAIR WELL | TEMPORARY ABANDON |
| | TUBING REPAIR | VENT OR FLARE | WATER DISPOSAL |
| DRILLING REPORT Report Date: | WATER SHUTOFF | SI TA STATUS EXTENSION | APD EXTENSION |
| | WILDCAT WELL DETERMINATION | ✓ OTHER | OTHER: cancel GR recomplete |
| 12 DESCRIPE PROPOSED OR | | all partinent datails including dates | |
| On June 21, 2011 River recomplete pursue the Green | Kerr McGee had an approve Kerr McGee had an approve on this well. In 2014 we ma River recomplete and plug a ent sundry will be submitted | d sundry to do a Green de the decision not to nd abandon the well. A | Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY November 04, 2014 |
| | | | |
| NAME (PLEASE PRINT) Kay E. Kelly | PHONE NUMB 720 929 6582 | Regulatory Analyst | |
| SIGNATURE N/A | | DATE 11/4/2014 | |

P.O. Box 173779 • DENVER, CO 80202-3779



October 2, 2014

OCT 09 2014

State of Utah Division of Oil, Gas and Mining 1594 West North Temple Ste. 1210 Salt Lake City, UT 84116 DIV. OF OIL, GAS & MINING

ATTENTION:

Dustin Doucet

RE:

Extended Shut-in and Temporarily Abandoned Well Requirements for Fee or State Leases- UDOGM letter dated September 4, 2014

Dear Mr. Doucet,

We are in receipt of your letter dated September 4, 2014 regarding the shut-in and temporarily abandoned status of wells operated by Kerr-McGee Oil and Gas Onshore. All required sundry notices have been filed as requested in the letter. Some wells documented in the letter previously had Plug and Abandonment procedures and notice of intent sundry notices submitted. Anadarko intends to Plug and Abandon the applicable wells by the end of the first quarter-2015.

The attached list explains the current well statuses and go forward plans for each well documented in the September 4, 2014 letter.

Should you have any additional questions or concerns, please don't hesitate to contact me direct at (720) 929-6100 or via email at andy.lytle@anadarko.com.

Sincerely,

Andy Lytle

Regulatory Supervisor

| WELL NAME | APL | LEASE | YEARS INACTIVE | PRIOR NOTICE | COMMENTS |
|--------------------|------------|------------|-------------------|--------------|---|
| BONANZA 1023-16J | 4304737092 | ML22186A | 7 YEARS 1 MONTH | 2ND NOTICE | PA NOI Sundry submitted 10/03/2014. |
| NBU 921-34L | 4304736388 | STUO1194A | 5 YEARS | 2ND NOTICE | Sundry submitted 09/16/2014 for the conversion to a monitor well (Not previously reported in 2012) and yearly status for a monitor well. |
| CIGE 79D | 4304730896 | ML23612 | 4 YEARS 4 MONTHS | 2ND NOTICE | Sundry submitted 09/16/2014, yearly status for a monitor well. |
| NBU 921-33J | 4304736394 | STU0015630 | 5 YEARS 2 MONTHS | 2ND NOTICE | PA Sundry approved 07/09/2014, on rig schedule for week of October 6-2014. |
| CIGE 3-32-9-22 | 4304730320 | ML22649 | 3 YEARS 11 MONTHS | 1ST NOTICE | PA Sundry approved 08/07/2012, on rig schedule for week of October 6-2014. |
| NBU 31-12B | 4304730385 | ML01197A | 2 YEARS 10 MONTHS | 1ST NOTICE | PA Sundry approved 07/23/2013, on rig schedule for week of October 6-2014. |
| NBU 69N2 | 4304731090 | U01194ST | 3 YEARS 3 MONTHS | 1ST NOTICE | PA NOI Sundry submitted 10/03/2014. |
| BONANZA 1023-20 | 4304735662 | ML47062 | 1 YEAR 1 MONTH | | Return to Production sundry submitted 10/03/2014. Producing since 04/25/2014, production accounting has been reporting production to UDOGM as of April 2014. |
| CIGE 140 | 4304731977 | ML10755 | 1 YEAR | | PA NOI Sundry submitted 10/02/2014. |
| CIGE 224 | 4304732883 | ML2252 | 1 YEAR | | PA NOI Sundry submitted 10/01/2014. |
| CIGE 239 | 4304733206 | ML22582 | 1 YEAR 6 MONTHS | | Return to Production sundry submitted 10/03/2014. Producing since 06/14/2014, production accounting has been reporting production to UDOGM as of June 2014. |
| CIGE 284 | 4304734792 | ML23612 | 1 YEAR 2 MONTHS | | Return to Production sundry submitted 10/03/2014. Producing since 03/29/2014, production accounting has been reporting production to UDOGM as of March 2014. |
| CIGE 5 | 4304730335 | U01207AST | 1 YEAR 3 MONTHS | | Sundry submitted 10/03/2014. This well is currently surface commingled with the NBU 922-31JT-1T meter. The well was mistakenly made in-active, therefore production was not allocating. The well has been made active and is presently allocating. 12/17/2009 a sundry for surface commingling was approved by UDOGM. |
| HALL ET AL 31 18 | 4304730664 | FEE | 1 YEAR 1 MONTH | | PA NOI Sundry submitted 09/30/2014. |
| MORGAN STATE 13-36 | 4304732817 | ML22265 | 1 YEAR 11 MONTHS | | PA NOI Sundry submitted 09/30/2014. |
| NBU 1021-16G | 4304735111 | ML10755 | 1 YEAR 4 MONTHS | | PA NOI Sundry submitted 10/03/2014. |
| NBU 562-19E | 4304737536 | ML22792 | 1 YEAR | | PA Sundry approved 07/09/2014, on rig schedule for week of October 6-2014. |
| STATE 1022-32I | 4304735648 | ML22798 | 1 YEAR 2 MONTHS | | PA NOI Sundry submitted 09/30/2014. |
| TRIBAL 31-60 | 4304733340 | ML28048 | 1 YEAR 2 MONTHS | | Return to Production sundry submitted 10/03/2014. A new meter installed 09/30/2014, well is currently intermitting. |
| WONSITS ST 2-32 | 4304732819 | ML47780 | 1 YEAR | | PA NOI Sundry submitted 10/01/2014. |